CMT-A50/A70

SERVICE MANUAL

Ver. 1.1 2005.02

US Model
Canadian Model
Australian Model
CMT-A70
AEP Model
UK Model
CMT-A50/A70
E Model
CMT-A50

Photo: CMT-A50

US and foreign patents licensed from Dolby Laboratories.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	FLM-A50
	Optical Pick-up Block Name	KSM-213CCP or KSM-213RCP
	Optical Pick-up Name	KSS-213C or KSS-213R
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CMAL1Z252A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 6 Ω loads, both channels driven from 100 - 10,000 Hz; rated 55 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

CD player section

System
- Compact disc digital audio system

Laser diode properties
- Material: GaAlAs
- Wave length: 780 nm
- Emission duration: Continuous
- Laser output: Less than 44.6 µW
- (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

Spindle speed
- 400 r/min (rpm) to 1 000 r/min (rpm) (CLV)

Number of channels
- 2

Frequency response
- 20 - 20 000 Hz +0/–1 dB

Wow and flutter
- Below measurable limit

Radio section

Frequency range
- FM 87.5 - 108 MHz
- AM
- US model: 530 - 1 710 kHz
- Other models: 531 - 1 611 kHz (9 kHz step)
- 530 - 1 610 kHz (10 kHz step)

IF
- FM: 10.7 MHz
- AM: 450 kHz

Aerials
- FM: Lead aerial
- AM: Loop aerial

Cassette-corder section

Recording system
- 4-track 2 channel stereo

Fast winding time
- Approx. 112 s (sec.) with Sony cassette C-60

Frequency response
- TYPE I (normal): 50 - 15 000 Hz

General

Speaker
- Tweeter: 4 cm dia., 6 Ω (CMT-A50)
- 2.5 cm dia., 6 Ω (CMT-A70)
- Woofer: 13 cm dia., 6 Ω
- Passive radiator: 10 cm dia. (CMT-A50 only)

Input
- LINE IN jack (stereo minijack)
- Minimum input level 430 mV

Outputs
- Headphones jack (stereo minijack):
- For 8 - 64 Ω impedance headphones
- OPTICAL DIGITAL OUT (CD) (optical output connector):
- Wavelength: 630 - 690 nm

Maximum power output
- CMT-A50: 20 W
- CMT-A70: 60 W

Power requirements
- For personal component system:
- US model: 120 V AC, 60 Hz
- Korean model: 220 V AC, 60 Hz
- Other models: 230 V AC, 50 Hz
- For remote control:
- 3 V DC, 2 R03 (size AAA) batteries

Power consumption
- CMT-A50: 50 W
- CMT-A70: 100 W

Dimensions
- Player:
- Approx. 136 × 151.8 × 204 mm (w/h/d) (incl. projecting parts)
- Speaker:
- CMT-A50: Approx. 128 × 287 × 215 mm (w/h/d) (incl. projecting parts)
- CMT-A70: Approx. 164 × 267 × 255 mm (w/h/d) (incl. projecting parts)

Ma
- CMT-A50:
- Player: Approx. 1.6 kg
- Left speaker: Approx. 4.3 kg
- Right speaker: Approx. 2.2 kg
- CMT-A70:
- Player: Approx. 1.6 kg
- Left speaker: Approx. 5.6 kg
- Right speaker: Approx. 2.9 kg

Supplied accessories
- Remote control (1)
- FM lead aerial (1)
- AM loop aerial (1)
- CD-ROM (SonicStage) (1)
- SonicStage Installation/Operating Guide (1)

Design and specifications are subject to change without notice.

PERSONAL COMPONENT SYSTEM

9-879-211-02
2005B05-1
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Sony Corporation
Personal Audio Group
Published by Sony Engineering Corporation

SONY

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

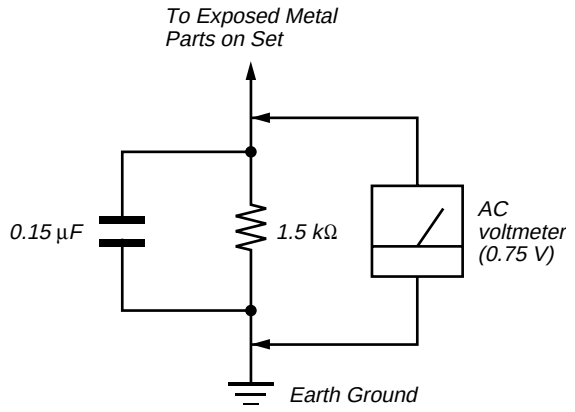


Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

DANGER	DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.	RADIATION DE LESER INVISIBLE LORS D'OUVERTURE. AVEC L'ENCLENCHEMENT DE SECURITE ANNULE. EVITER L'EXPOSITION DIRECTE .AU RAYON.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

TABLE OF CONTENTS

1. SERVICING NOTES 4

2. GENERAL 6

3. DISASSEMBLY

3-1. Disassembly Flow 9
3-2. Cabinet Rear 10
3-3. CD Door 10
3-4. CD Mechanism Deck (FLM-A50) 11
3-5. SUB Board 11
3-6. Top Case Assy 12
3-7. MAIN Board 12
3-8. CD Board 13
3-9. Tray 13
3-10. Optical Pick-up Block (KSM-213CCP or KSM-213RCP) 14
3-11. Optical Pick-up (KSS-213C) 14
3-12. Optical Pick-up (KSS-213R) 15
3-13. Tape Mechanism Deck (CMAL1Z252A) 15

4. TEST MODE 16

5. ELECTRICAL ADJUSTMENTS

Deck Section 18
CD Section 19

6. DIAGRAMS

6-1. Block Diagram – SERVO Section – 20
6-2. Block Diagram – MAIN Section – 21
6-3. Block Diagram – PANEL, POWER SUPPLY Section – 22
6-4. Printed Wiring Board – CD Board – 24
6-5. Schematic Diagram – CD Board – 25
6-6. Printed Wiring Board – MAIN Board (Component Side) – 26
6-7. Printed Wiring Board – MAIN Board (Conductor Side) – 27
6-8. Schematic Diagram – MAIN Board (1/2) – 28
6-9. Schematic Diagram – MAIN Board (2/2) – 29
6-10. Printed Wiring Board – SUB Board – 30
6-11. Schematic Diagram – SUB Board – 31
6-12. Printed Wiring Boards – PANEL, MOTOR Section – ... 32
6-13. Schematic Diagram – PANEL, MOTOR Section – 33
6-14. Printed Wiring Boards – AMP, POWER SUPPLY Section (CMT-A50 only) – .. 34
6-15. Schematic Diagram – AMP, POWER SUPPLY Section (CMT-A50 only) – .. 35
6-16. Printed Wiring Boards – AMP Section (CMT-A70 only) – 36
6-17. Schematic Diagram – AMP Section (CMT-A70 only) – 37
6-18. Printed Wiring Board – POWER SUPPLY Section (CMT-A70 only) – 38
6-19. Schematic Diagram – POWER SUPPLY Section (CMT-A70 only) – 39

7. EXPLODED VIEWS

7-1. Overall Section 50
7-2. Front Panel Section 51
7-3. Top Case Section 52
7-4. CD Mechanism Deck Section (FLM-A50) 53
7-5. Optical Pick-up Section (KSM-213CCP) 54
7-6. Optical Pick-up Section (KSM-213RCP) 55
7-7. Speaker (Left) Section (A50) 56
7-8. Speaker (Right) Section (A50) 57
7-9. Speaker (Left) Section (A70) 58
7-10. Speaker (Right) Section (A70) 59

8. ELECTRICAL PARTS LIST 60

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

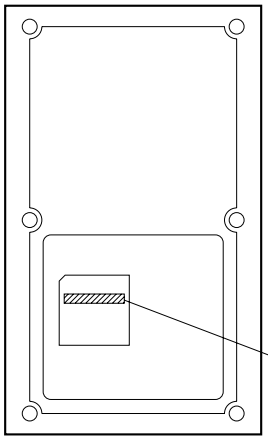
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

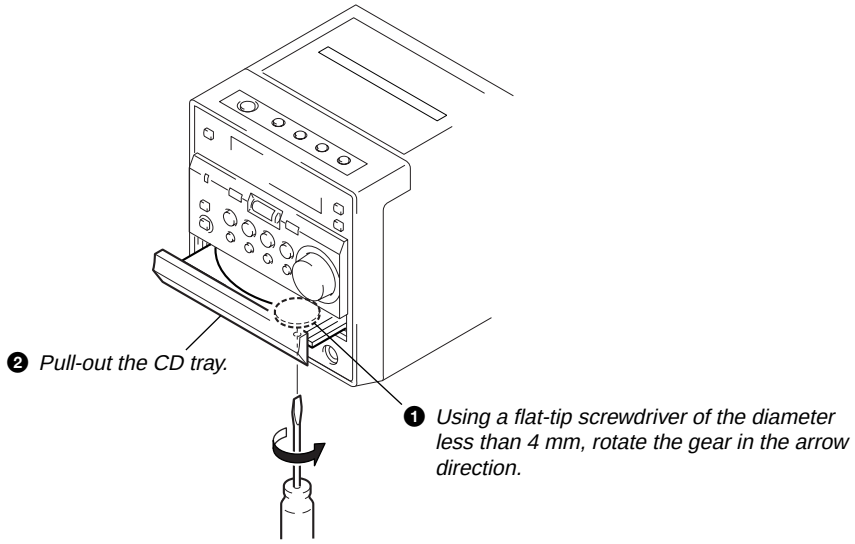
Carry out the "S curve check" in "CD section adjustment" and check that the S curve waveforms is output three times.

• MODEL IDENTIFICATION
– Left Speaker Back Panel –

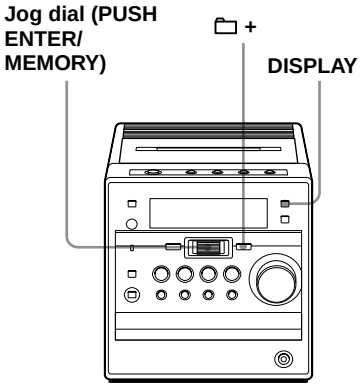


Model	Destination	Power Requirements Indication
CMT-A50	AEP, UK, Italian, East European and Russian models	AC: 230V〜50Hz 50W
	Korean model	AC: 220V〜60Hz 50W
CMT-A70	US and Canadian model	AC: 120V 60Hz 100W
	AEP, UK, Italian, East European, Russian and Australian models	AC: 230V〜50Hz 100W

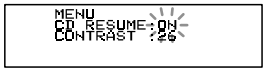
HOW TO OPEN THE CD TRAY WHEN POWER SWITCH TURNS OFF.



Adjusting the contrast of the display



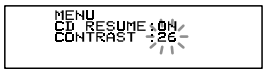
1 Press DISPLAY when the player is turned off.



The MENU display appears.

2 Press the jog dial or + to select "CONTRAST".

The contrast digits (1 - 32) flash on the display.



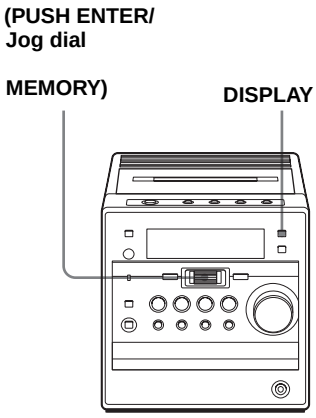
3 Turn the jog dial to select the number for the contrast you want while observing the display.

4 Press the jog dial to enter the selection.

Changing the resume play setting

The player is initially set to start playback from the point you last stopped playing (resume play)

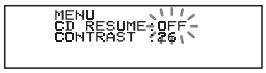
You can cancel resume play and the player always will start from the first track.



1 Press DISPLAY when the player is turned off.

2 Turn the jog dial to select "CD RESUME OFF".

"OFF" flashes on the display.



3 Press the jog dial to enter the selection.

To go back to the clock display, press the jog dial again.

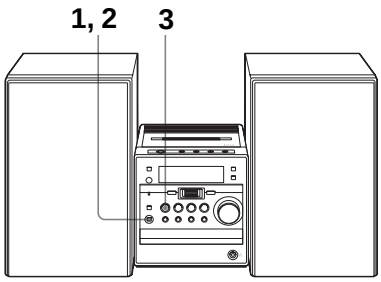
To reset the resume play function

In step 2 above turn the jog dial until "CD RESUME ON" appears and then press the jog dial twice.

SECTION 2
GENERAL

This section is extracted from instruction manual.

Playing a CD



For hookup instructions.

1 ≜OPEN/CLOSE

Press ≜ OPEN/CLOSE (direct power-on) and place the CD on the CD tray.

With the label side up

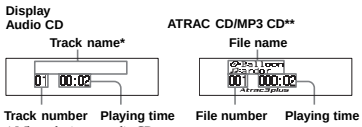
2 ≜OPEN/CLOSE

Press ≜ OPEN/CLOSE to close the CD tray.

3 CD

Press CD ▶II (▶II on the remote).

The player plays all the tracks once.



* When playing an audio CD containing text information such as CD-TEXT, track name appears on the display.

** When playing an MP3 CD, "MP3" appears on the display.

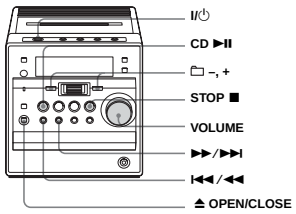
Note

Before playing an ATRAC CD/MP3 CD, this player reads all file and group information on the CD. Depending on the file structure, it may take more than a minute to read them. During this time, "Reading" is displayed.

Tips

- To listen through headphones, connect the headphones to the ∩ (headphones) jack.
- Playback starts from the point you last stopped playing (Resume play). During stop, the point to be played is displayed.
  To start play from the beginning of the first track, press STOP ■ in stop mode.
  To cancel the resume play.

Use these buttons for additional operations



To	Do this
adjust the volume	Turn the VOLUME control. (Press VOL +*1, – on the remote.)
stop playback	Press STOP ■ (■ on the remote).
pause playback	Press CD ▶II*2 (▶II on the remote). The playing time of the current track/file flashes on the display. Press the button again to resume play after pause.
go to the next track	Press ▶▶/▶▶I.
go back to the previous track	Press I◀◀ /◀◀.

*1 The button has a tactile dot.

*2 There is a tactile dot beside CD ▶II on the main unit.

continued

Playing a CD (continued)

To	Press
select a group*3	🗀 + to go forward and 🗀 – to go backward
select a file*3	▶▶/▶▶I to go forward and I◀◀ /◀◀ to go backward
remove the CD	≜ OPEN/CLOSE*4
turn on/off the player	I/⏻

*3 You can operate during play of ATRAC CDs/MP3 CDs.

*4 Once you open the CD tray, the track to start play will change to the beginning of the first track.

The structure of ATRAC CDs/MP3 CDs

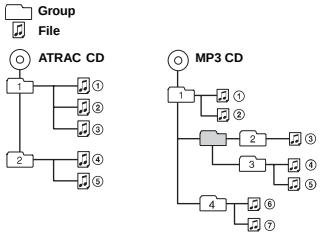
ATRAC CDs/MP3 CDs consist of "files" and "groups." A "file" is equivalent to a "track" of an audio CD. A "group" is a bundle of files and is equivalent to an "album."

For MP3 CDs, this CD player recognizes an MP3 folder as a "group" so that ATRAC CDs and MP3 CDs can be operated in the same way.

Playing order of ATRAC CDs and MP3 CDs

For ATRAC CDs, files are played in the order selected in SonicStage.

For MP3 CDs, the playing order may differ depending on the method used to record MP3 files on the disc. In the following example, files are played in order of ① to ⑦.



Notes

- If ATRAC3plus/ATRAC3 files and MP3 files are recorded on the same CD, this CD player plays the ATRAC3plus/ATRAC3 only.
- The playback capability of this CD player may vary depending on the quality of the disc and the condition of the recording device.
- Characters that can be displayed on this CD player are listed below.
  – A to Z
  – a to z
  – 0 to 9
  – ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | } ~
  If you use other characters on your computer using software such as SonicStage, they are displayed as "–" on this CD player.
- On a disc that has ATRAC3plus/ATRAC3/ MP3 files, do not save files in other formats and do not make unnecessary groups.

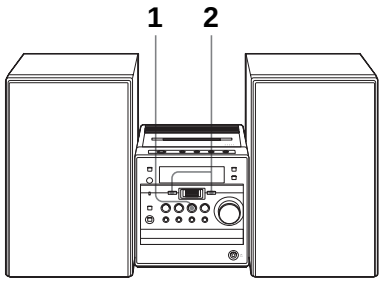
Notes on ATRAC CDs

- Maximum number of groups: 255
  Maximum number of files: 999
- CD-Rs/CD-RWs recorded in the ATRAC3plus/ATRAC3 format cannot be played on your computer.

Notes on MP3 CDs

- Maximum number of groups: 100
  Maximum number of files: 400
  Maximum directory level: 8
- A group that does not include an MP3 file is skipped.
- Be sure to add the file extension "mp3" to the file name. However, if you add the file extension "mp3" to a file other than an MP3 file, the player will not be able to recognize the file properly.
- This player can play bit rates of 16 to 320 kbps, and sampling frequencies of 32/44.1/ 48 kHz. Variable Bit Rate (VBR) file can also be played.
- To compress a source in an MP3 file, we recommend setting the compression parameters to "44.1 kHz," "128 kbps," and "Constant Bit Rate."
- To record up to the maximum capacity, set the writing software to "halting of writing."
- To record to the maximum capacity at one time up on media that has nothing recorded on it, set the writing software to "Disc at Once."

Listening to the radio



For hookup instructions.

1 TUNER AUTOPRESET

Press TUNER BAND•AUTO PRESET (BAND on the remote) repeatedly until the band you want appears on the display (direct power-on).

Display

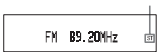
2

Press TUNING + or TUNING – and hold it until the frequency digits begin to change on the display.

The player automatically scans the radio frequencies and stops when it finds a clear station.

If you cannot tune in a station, press TUNING + or TUNING – repeatedly to change the frequency step by step.

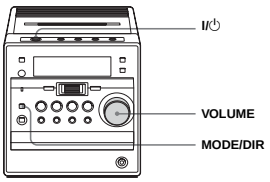
Indicates an FM stereo broadcast



Tips

- If the FM broadcast is noisy, press MODE/DIR (MODE on the remote) repeatedly until "Mono" appears on the display and radio will play in monaural.
- If you need to change the AM tuning interval.
- When you tune in an FM station that provides RDS (Radio Data System) services, "R•D•S" and the name of the station appear on the display (European model only). For details.

Use these buttons for additional operations



To	Do this
adjust the volume	Turn the VOLUME control. (Press VOL +*, – on the remote.)
turn on/off the radio	Press I/⏻.

* The button has a tactile dot.

To improve broadcast reception

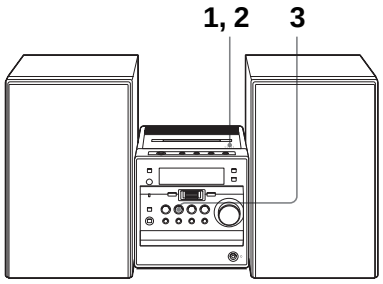
FM

Keep the FM lead aerial as horizontal as possible and reorient it.

AM

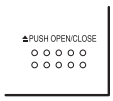
Keep the AM loop aerial away as far as possible from the player and reorient it.

Playing a tape



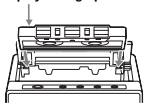
For hookup instructions.

1

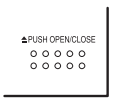


Press ⏏ PUSH OPEN/CLOSE to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only .

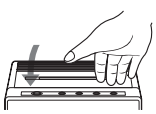
With the side you want to play facing up



2



Press ⏏ PUSH OPEN/CLOSE to close the compartment.

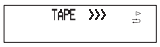


3 TAPE

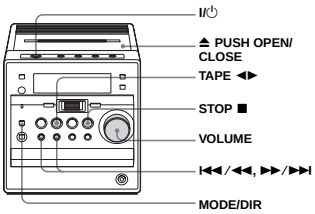
Press TAPE ◄► (◄► on the remote).

The player turns on (direct power-on) and starts playing.

Display



Use these buttons for additional operations



To	Do this
adjust the volume	Turn the VOLUME control. (Press VOL +*, – on the remote.)
stop playback	Press STOP ■ (■ on the remote).
play the reverse side	Press TAPE ◄► (◄► on the remote).
fast-forward or rewind the tape	Press ►►/►►I or I◄◄/◄◄.
eject the cassette	Press ⏏ PUSH OPEN/CLOSE.
turn on/off the player	Press I/⏻.

* The button has a tactile dot.

To select the direction mode of the tape

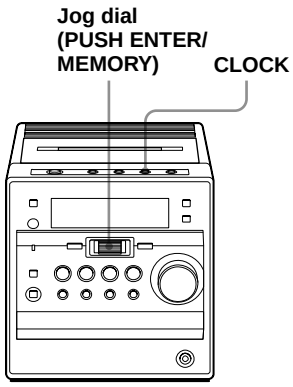
Press MODE/DIR repeatedly (MODE on the remote).

To play	Display shows
one side of the tape	⇄
both sides of the tape from the upper side to reverse side	⇉
both sides of the tape repeatedly	⇄

The Timer

Setting the clock

"– –:– –" indicator appears on the display until you set the clock.



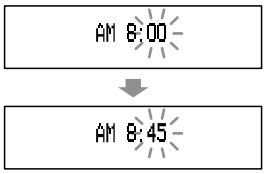
Before you begin, hook up the system.

1 Press and hold CLOCK until the hour digit flashes.

2 Set the clock.

① Turn the jog dial to set the hour and press it.

② Turn the jog dial to set the minutes.



3 Press the jog dial.
The clock starts from 00 seconds.

Note

If you disconnect the AC power cord, the clock display may return to "– –:– –". In this case set the clock again.

Tip

The time display system of this player is the 12-hour system.
AM 12:00 = midnight
PM 12:00 = noon

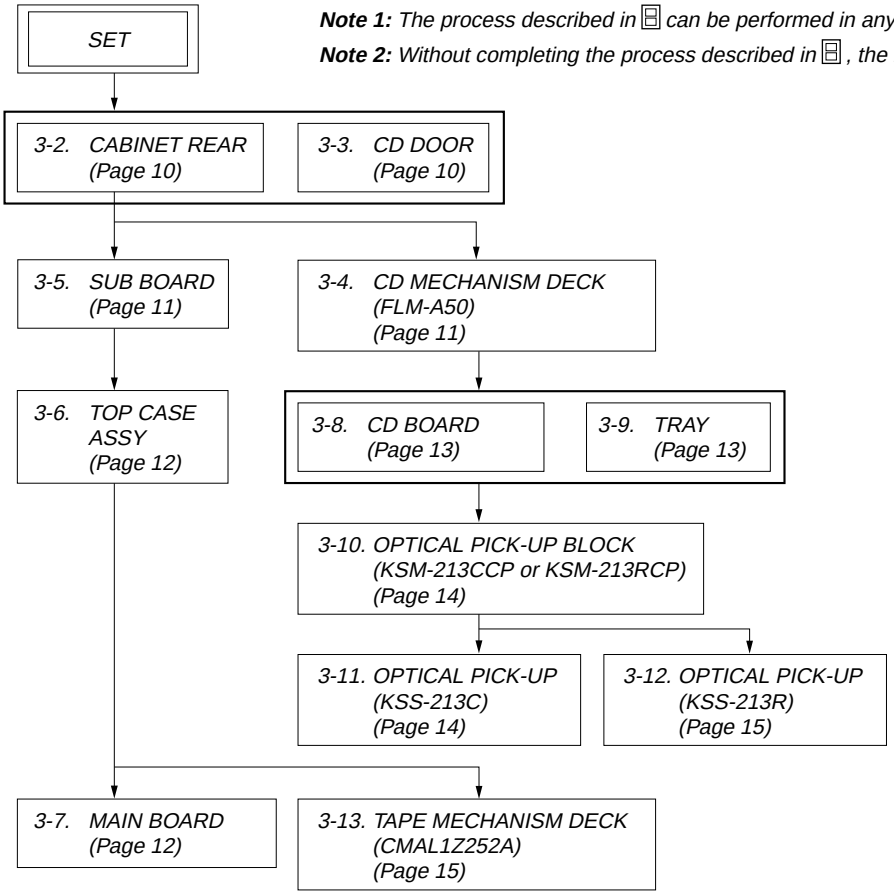
To check the present time

Press CLOCK to display the clock, and press it again to go back to the previous display.

SECTION 3
DISASSEMBLY

- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

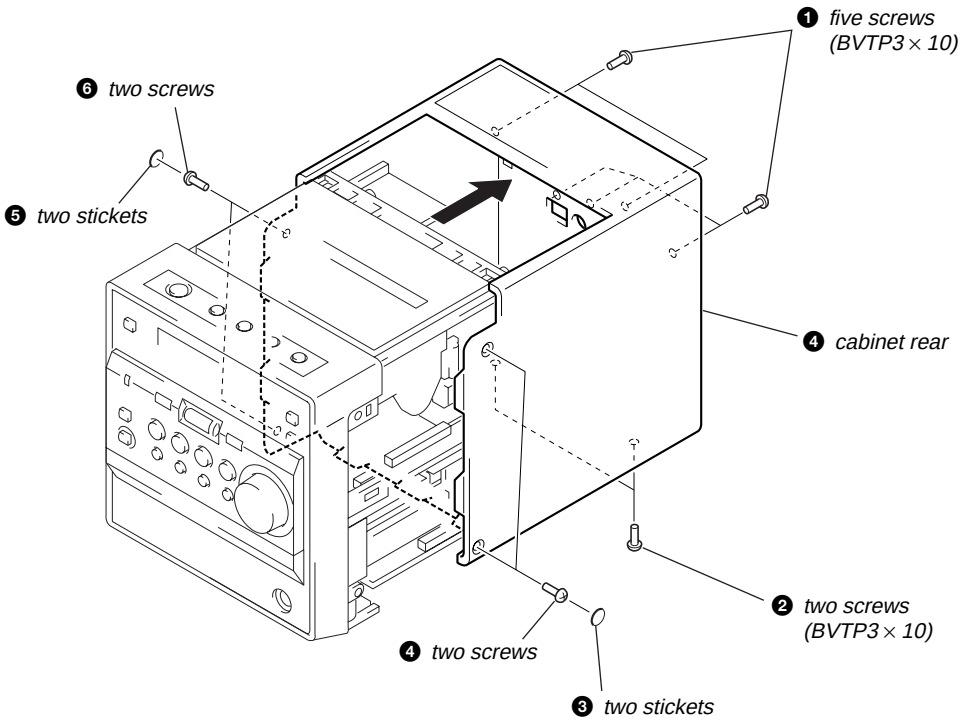

SET
3-2. CABINET REAR (Page 10)
3-3. CD DOOR (Page 10)
3-5. SUB BOARD (Page 11)
3-4. CD MECHANISM DECK (FLM-A50) (Page 11)
3-6. TOP CASE ASSY (Page 12)
3-8. CD BOARD (Page 13)
3-9. TRAY (Page 13)
3-10. OPTICAL PICK-UP BLOCK (KSM-213CCP or KSM-213RCP) (Page 14)
3-11. OPTICAL PICK-UP (KSS-213C) (Page 14)
3-12. OPTICAL PICK-UP (KSS-213R) (Page 15)
3-7. MAIN BOARD (Page 12)
3-13. TAPE MECHANISM DECK (CMAL1Z252A) (Page 15)

Note 1: *The process described in ☐ can be performed in any order.*

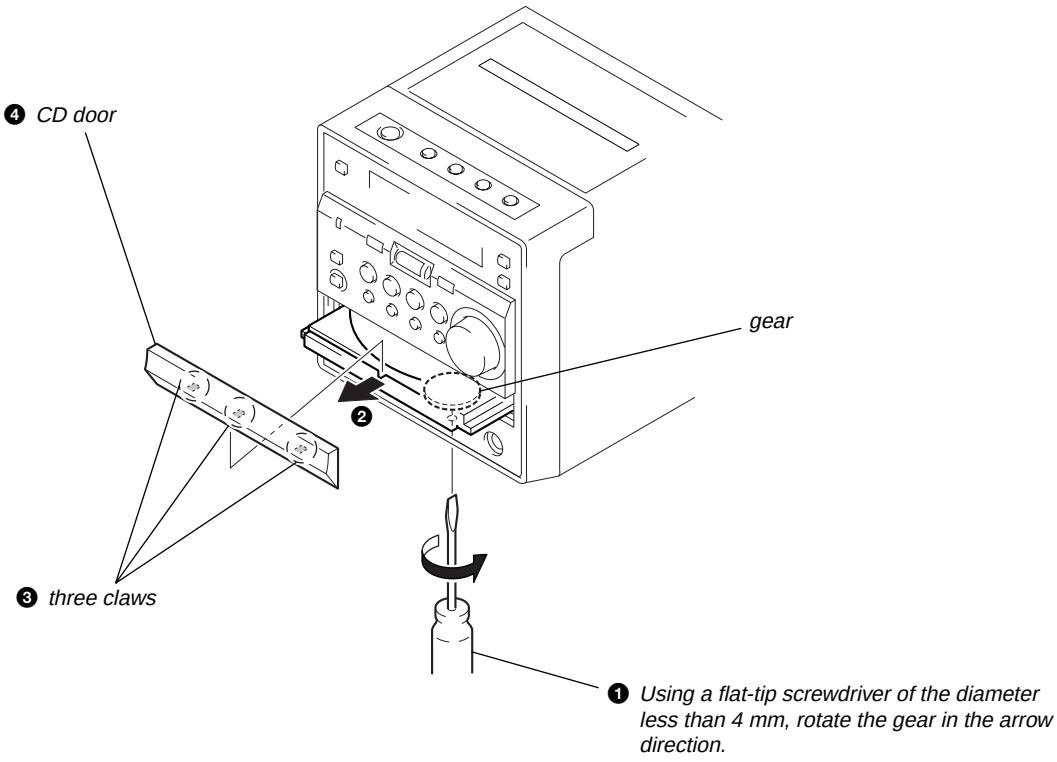
Note 2: *Without completing the process described in ☐ , the next process can not be performed.*

Note: Follow the disassembly procedure in the numerical order given.

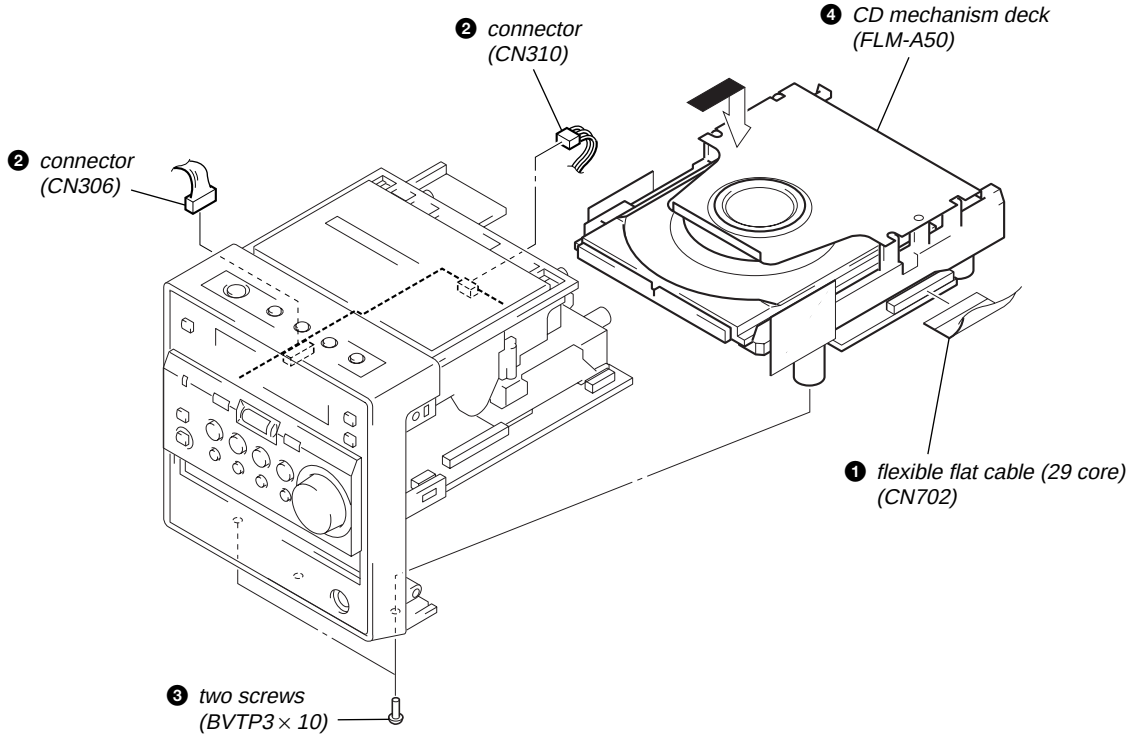
3-2. CABINET REAR



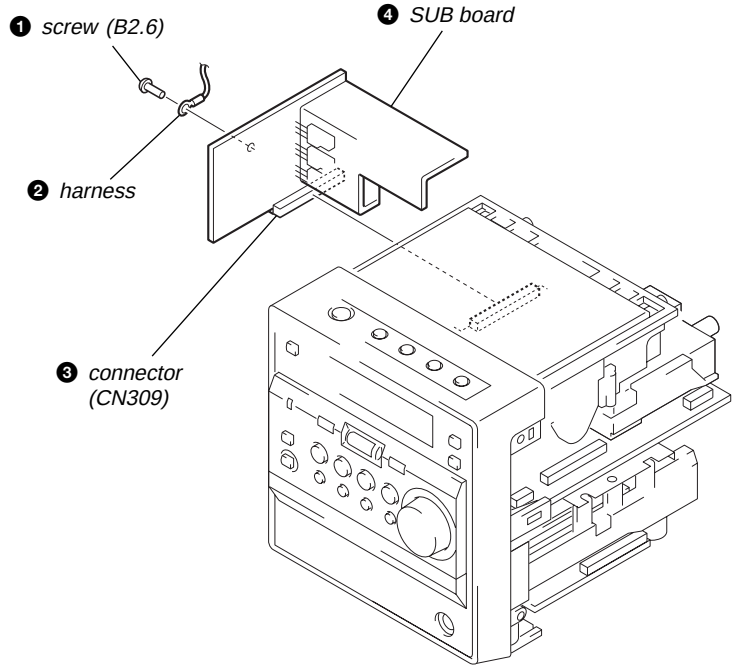
3-3. CD DOOR


❹ CD door
gear
❷
❸ three claws
❶ Using a flat-tip screwdriver of the diameter less than 4 mm, rotate the gear in the arrow direction.

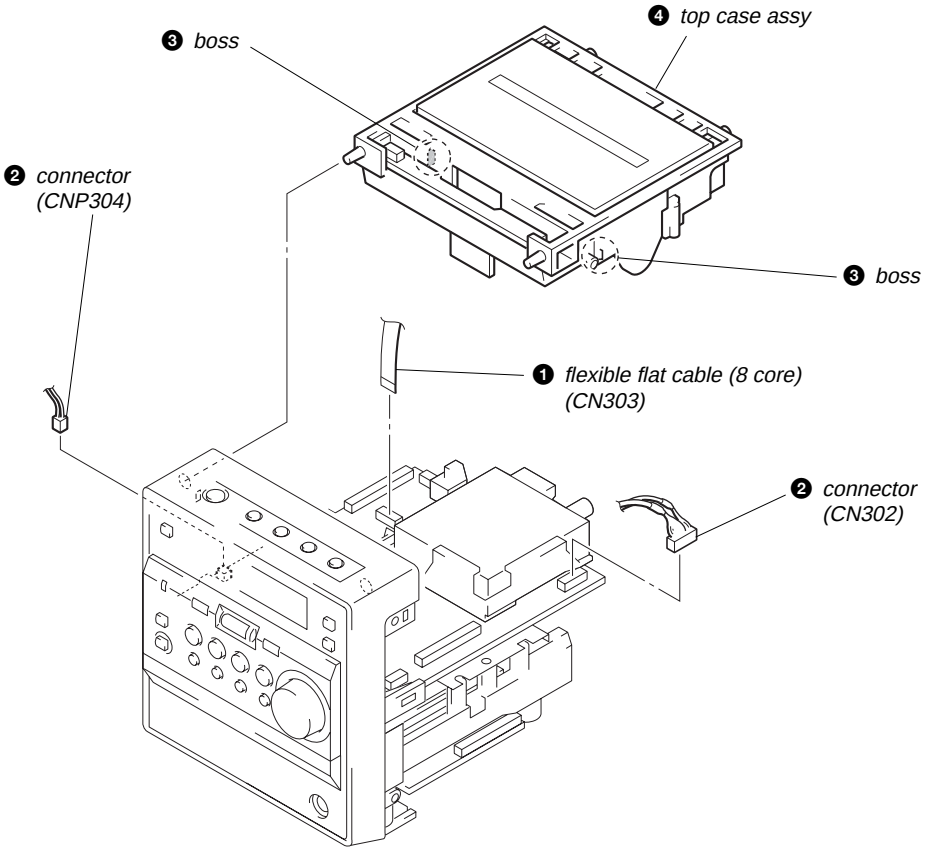
3-4. CD MECHANISM DECK (FLM-A50)



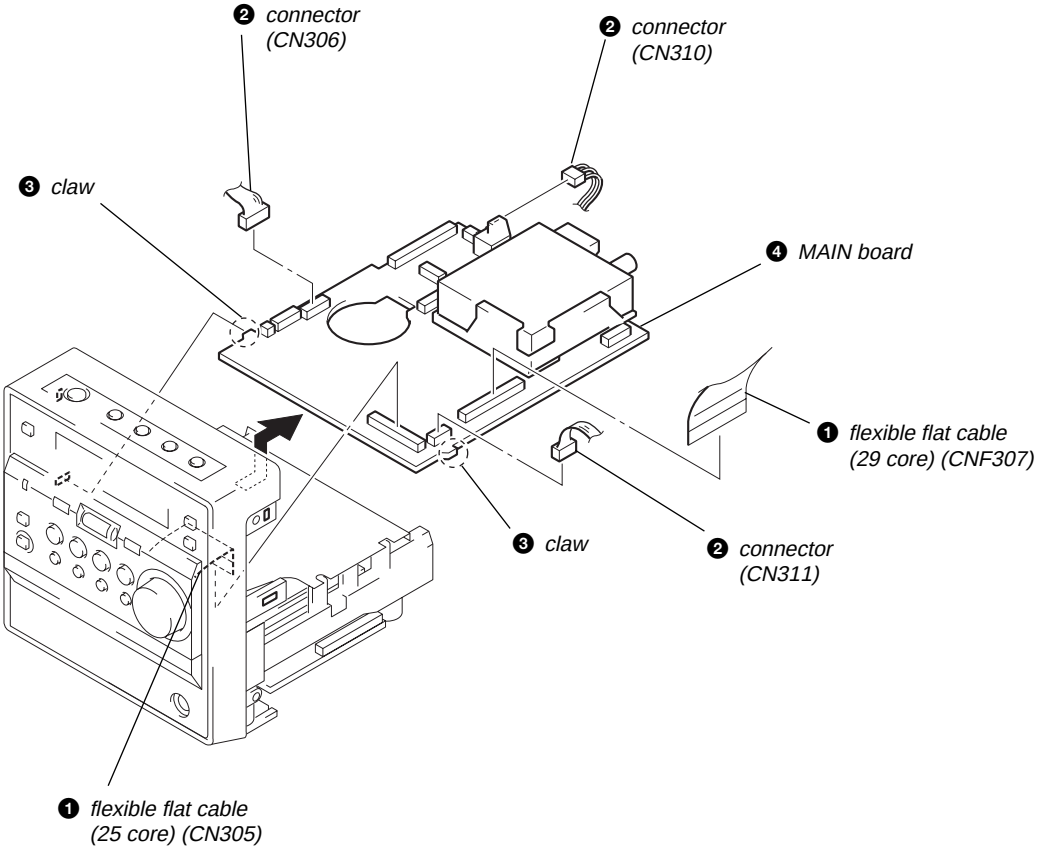
3-5. SUB BOARD



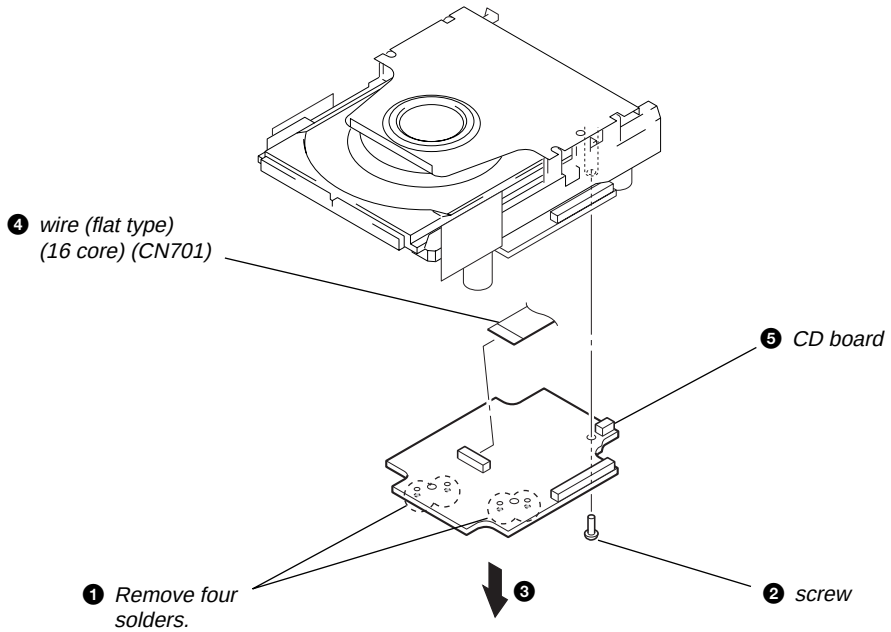
3-6. TOP CASE ASSY



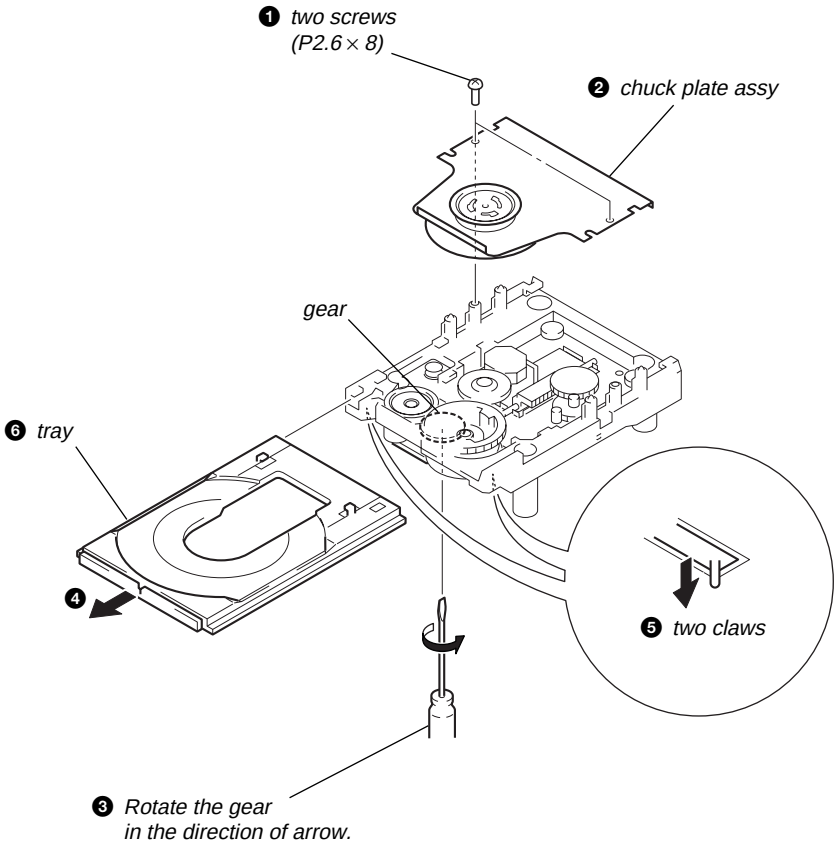
3-7. MAIN BOARD



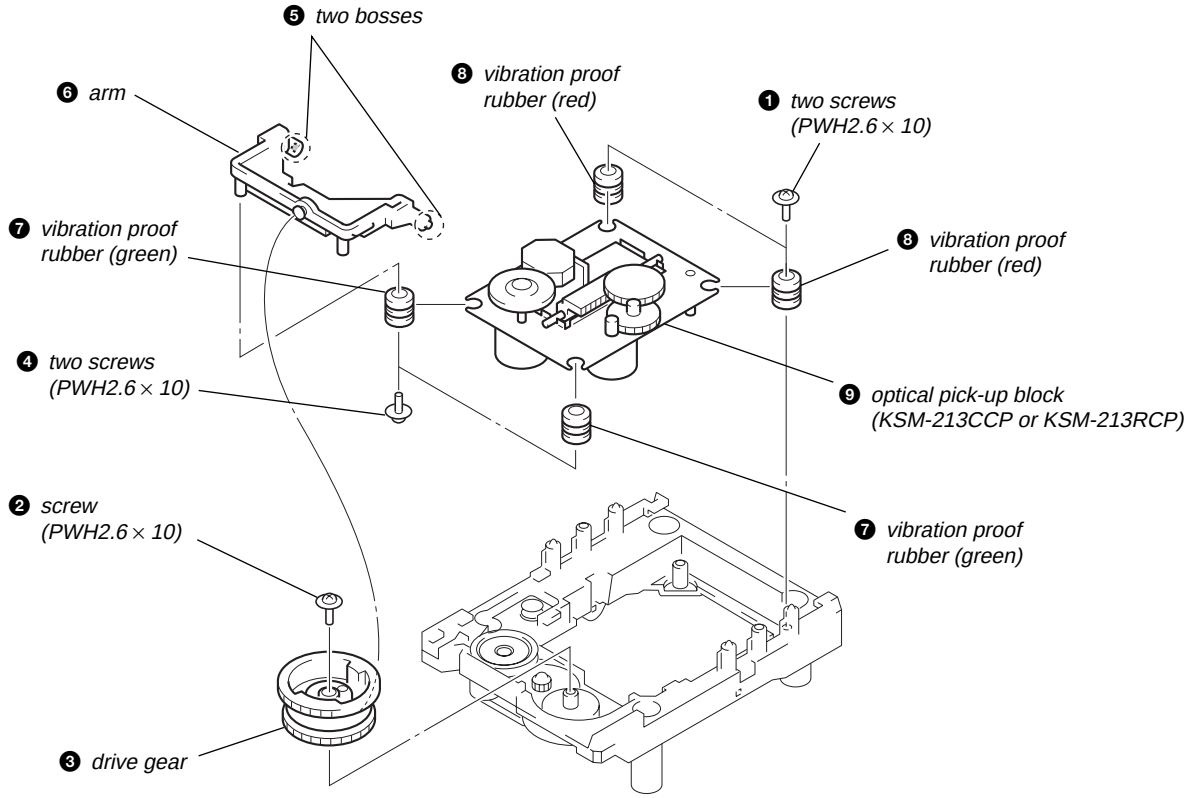
3-8. CD BOARD



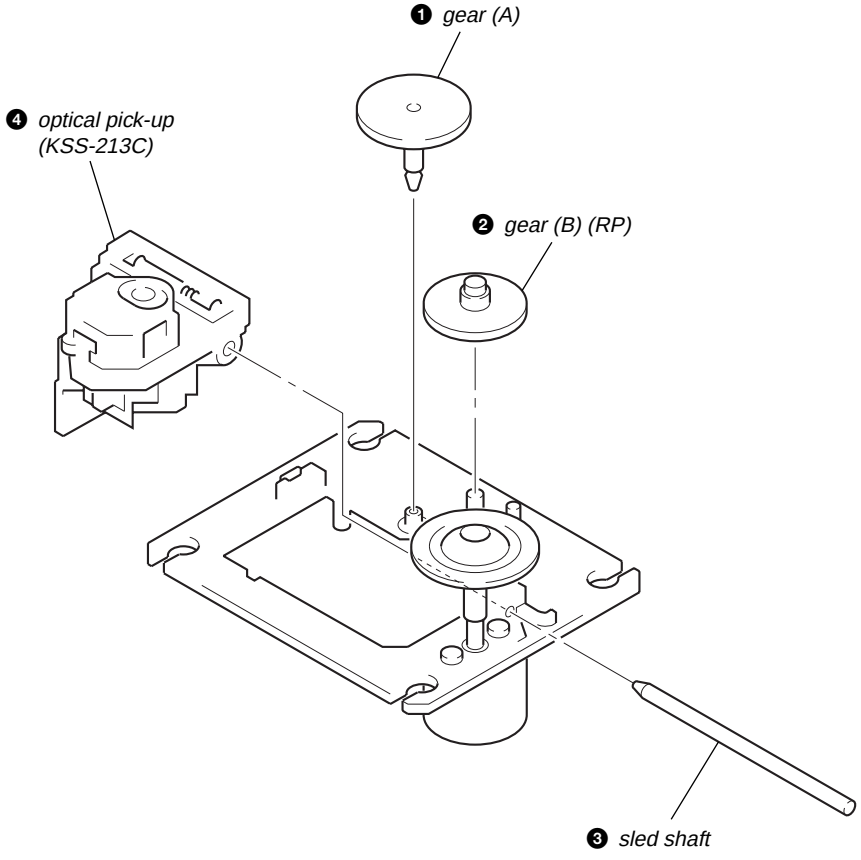
3-9. TRAY



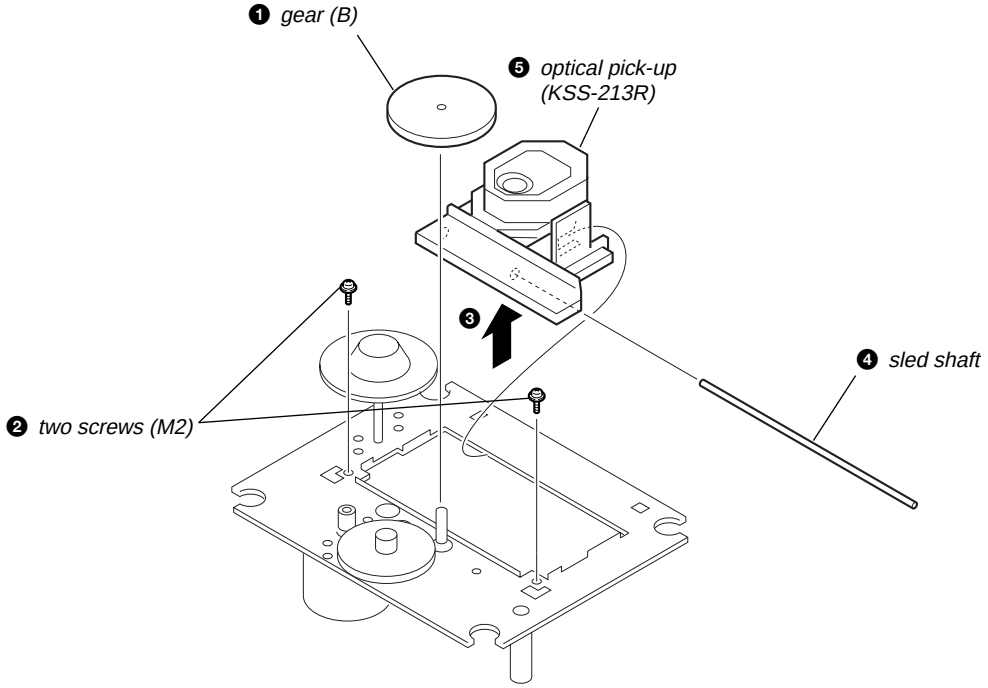
3-10. OPTICAL PICK-UP BLOCK (KSM-213CCP or KSM-213RCP)


❺ two bosses
❻ arm
❽ vibration proof rubber (red)
❶ two screws (PWH2.6 × 10)
❼ vibration proof rubber (green)
❽ vibration proof rubber (red)
❹ two screws (PWH2.6 × 10)
❾ optical pick-up block (KSM-213CCP or KSM-213RCP)
❷ screw (PWH2.6 × 10)
❼ vibration proof rubber (green)
❸ drive gear

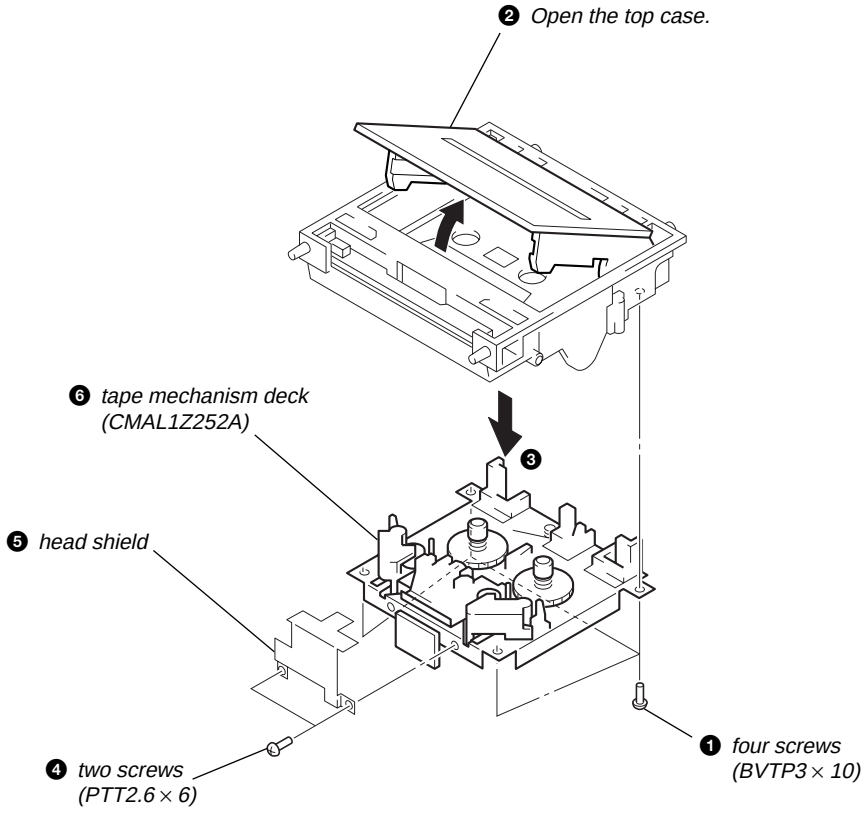
3-11. OPTICAL PICK-UP (KSS-213C)



3-12. OPTICAL PICK-UP (KSS-213R)



3-13. TAPE MECHANISM DECK (CMAL1Z252A)



SECTION 4
TEST MODE

CD TEST MODE

1. Entering The CD Test Mode

Procedure:

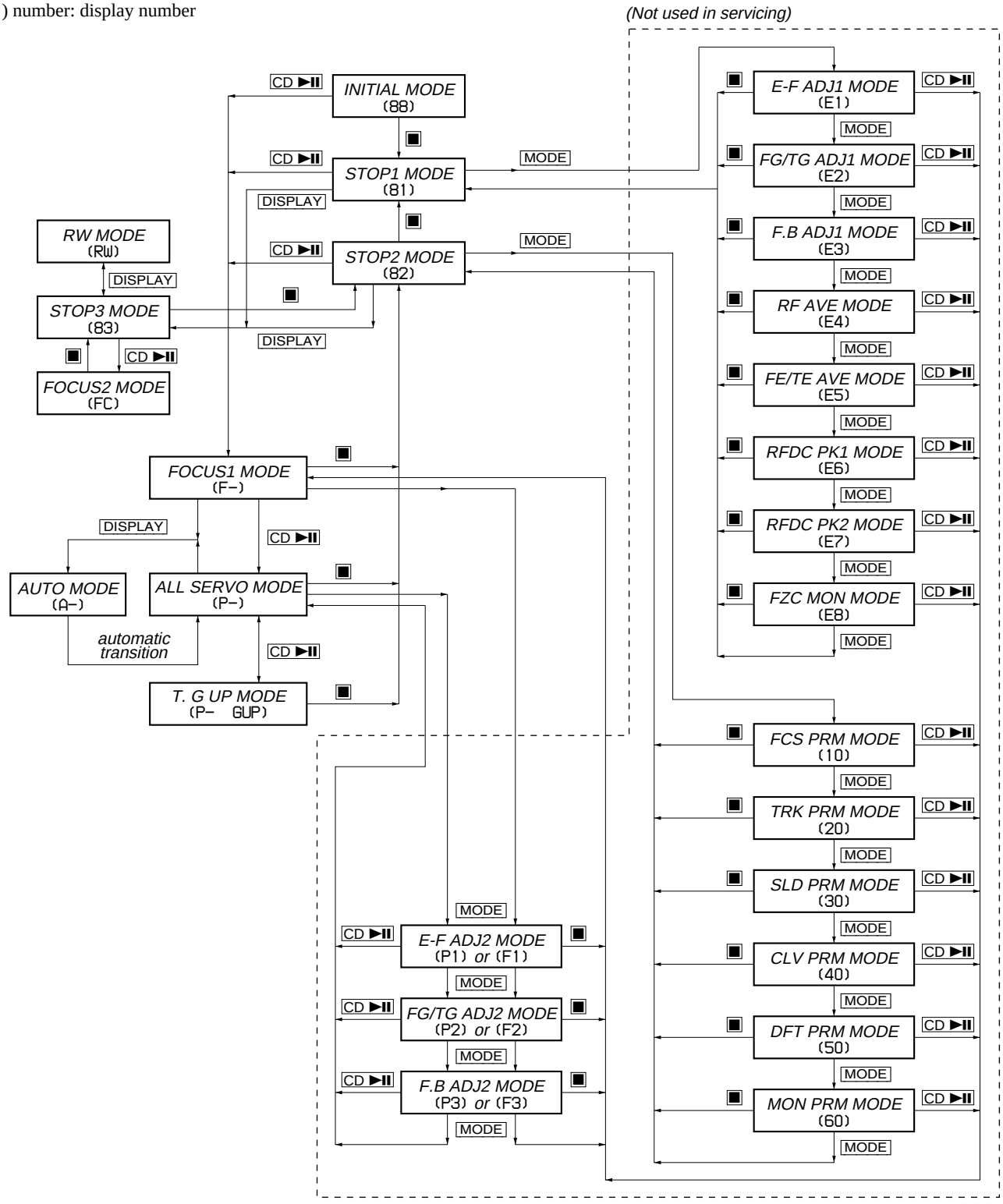
1. Press the [POWER] button to turn the power on, and [FUNCTION] button to select the CD function.
2. Load a disc for test.
3. Press the three buttons of [■] , [MODE/DIR] and [CLOCK] simultaneously.
4. Enter the CD Test Mode and display “88” on the LCD.
5. In the CD Test Mode, it changes mode as following figure.
6. In the mode of except FOCUS2 mode, press the [I◄◄/◄◄] or [►►/►►I] button to move the sled motor.

2. Releasing The CD Test Mode

To release this mode, press the [DISPLAY] button for to seconds in the mode of STOP1, STOP2 or STOP3. Or disconnect the AC plug.

CD Test Mode flow:

( ) number: display number



DISPLAY TEST MODE

Procedure:

1. Press the [POWER] button to turn the power on.
2. Press the three buttons of [■] , [MODE/DIR] and [TIMER] simultaneously.
3. Enter the Display Test Mode and display the version of microcomputer (IC309 on the MAIN board) for 10 seconds.
4. Then lights up the all segments and all off alternately every 10 seconds.
5. To release this mode, press the [DISPLAY] button for 2 seconds.

SECTION 5
ELECTRICAL ADJUSTMENTS

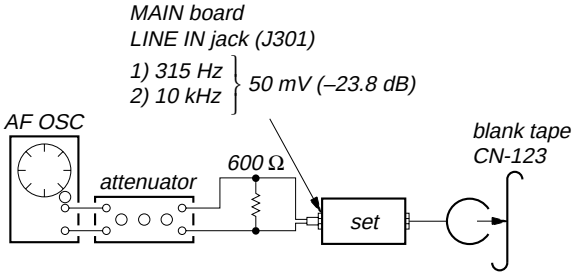
DECK SECTION | 0 dB = 0.775 V

- **Precaution**
  1. The adjustment should be performed with the rated power supply voltage.
  2. The adjustments should be performed for both L-ch and R-ch.

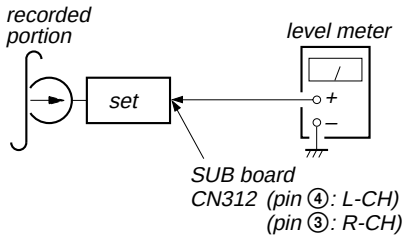
REC BIAS ADJUSTMENT

Procedure:

1. Record mode



2. Mode: Playback

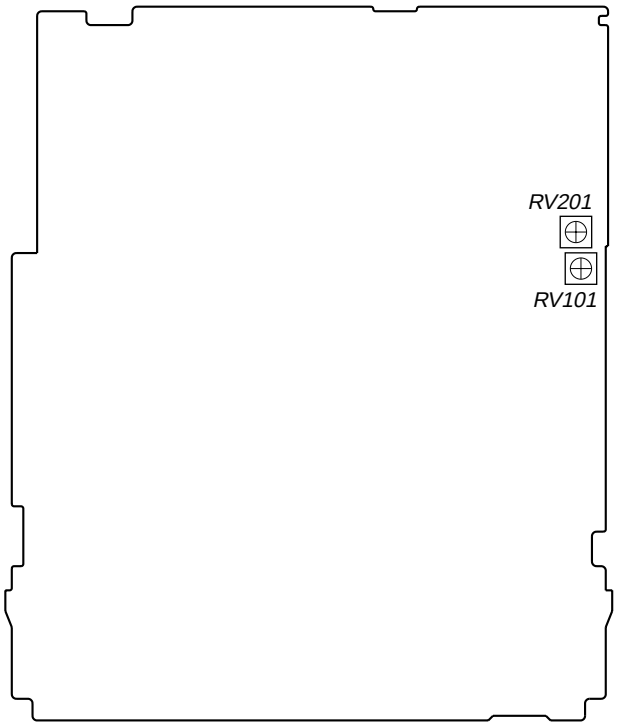


3. Confirm playback the signal recorded in step 1 become adjustment level as follows.
4. If these levels do not adjustment level, adjustment the RV101 (L-ch) and RV201 (R-ch) to repeat steps 1 and 4.

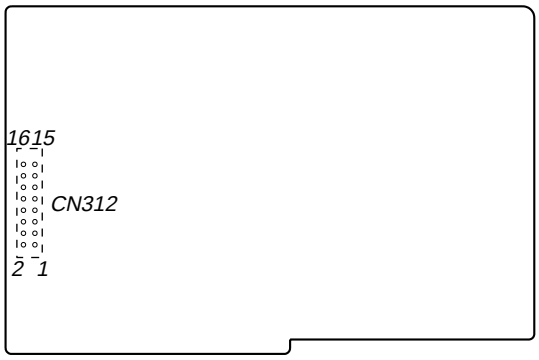
Adjustment level: Playback output of 315 Hz to playback output of 10 kHz: 0 ± 1.0 dB (0 ± 4.5mV).

Adjustment Location:

– MAIN BOARD (Component Side) –



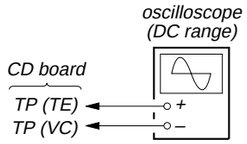
– SUB BOARD (Conductor Side) –



CD SECTION

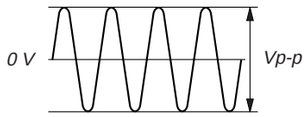
Note:
1. Perform all CD section check in the CD Test Mode. (Refer to page 16)
2. Use the PATD-012 disc (Part No.: 4-225-203-01).
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

TRAVERSE CHECK

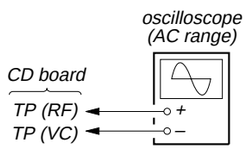


Procedure:
1. Connect an oscilloscope to TP (TE) and TP (VC) on the CD board.
2. Load the disc (PATD-012).
3. Press the three buttons of ■, MODE/DIR and CLOCK simultaneously to enter the CD Test Mode and display “88” (Initial mode).
4. Press the CD ▶II button to enter the FOCUS1 mode and display “F-”.
5. Confirm that the center level of waveform is 0 V.
6. Confirm that the Vp-p value of waveform is 0.35 to 1.1 V.

VOLT/DIV: 0.2 V (with the 10:1 probe in use)
TIME/DIV : 1 ms

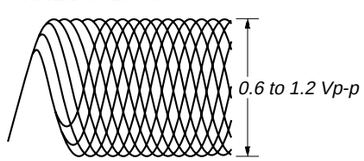


FOCUS BIAS CHECK



Procedure:
1. Connect an oscilloscope to TP (RF) and TP (VC) on the CD board.
2. In the FOCUS1 mode, press the CD ▶II button to enter the ALL SERVO mode and display “P-”.
3. Confirm that the oscilloscope waveform is as shown in the below figure. (eye pattern)
   A good eye pattern means that the diamond shape “◊” in the center of the waveform can be clearly distinguished.

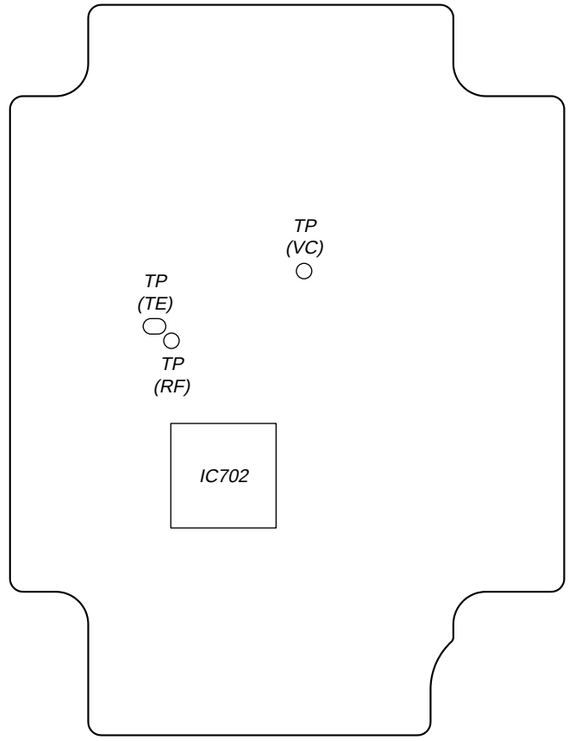
VOLT/DIV: 0.2 V (with the 10: 1 probe in use.)
TIME/DIV: 200 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

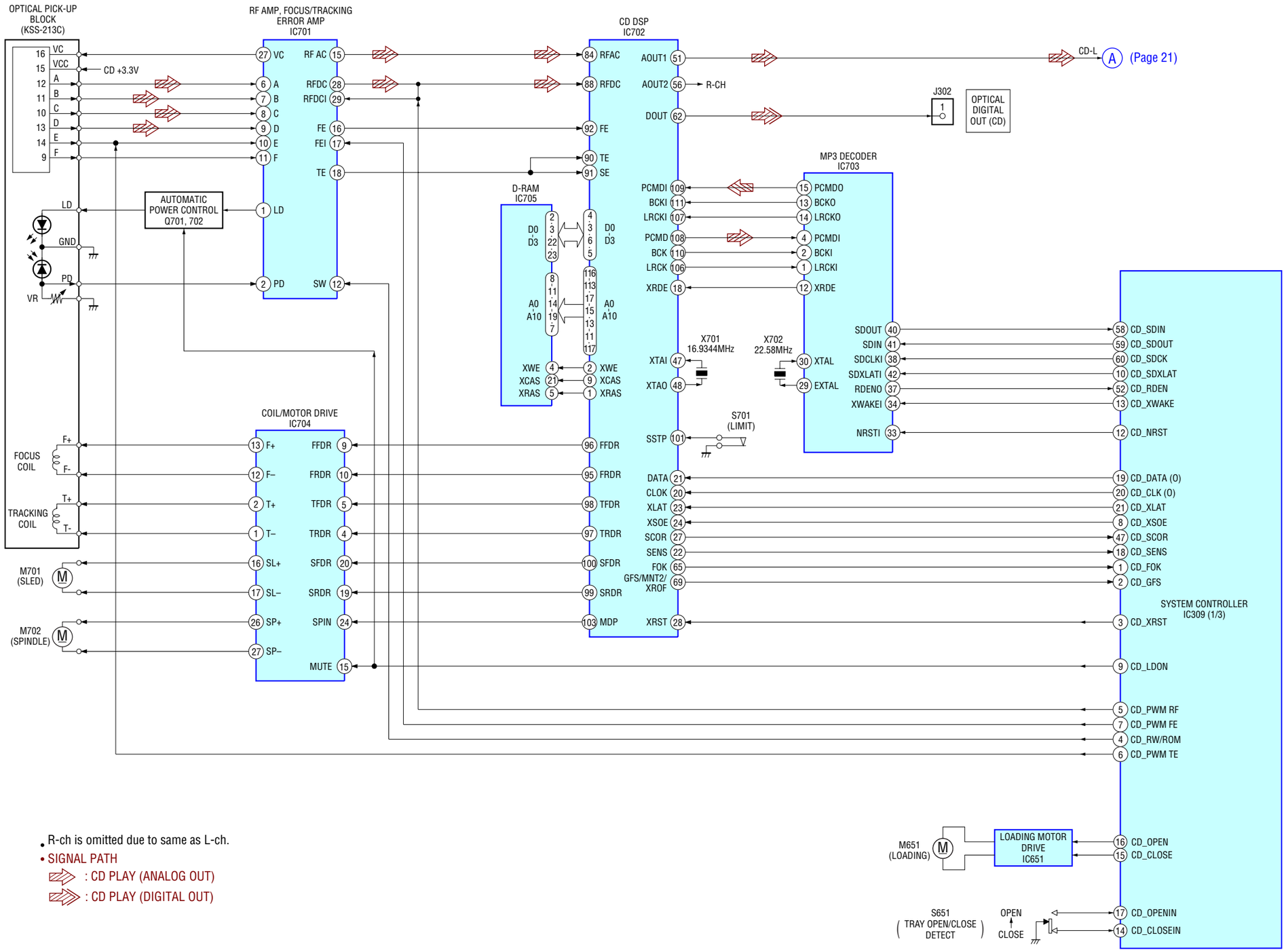
Checking Location:

– CD Board (Conductor Side) –



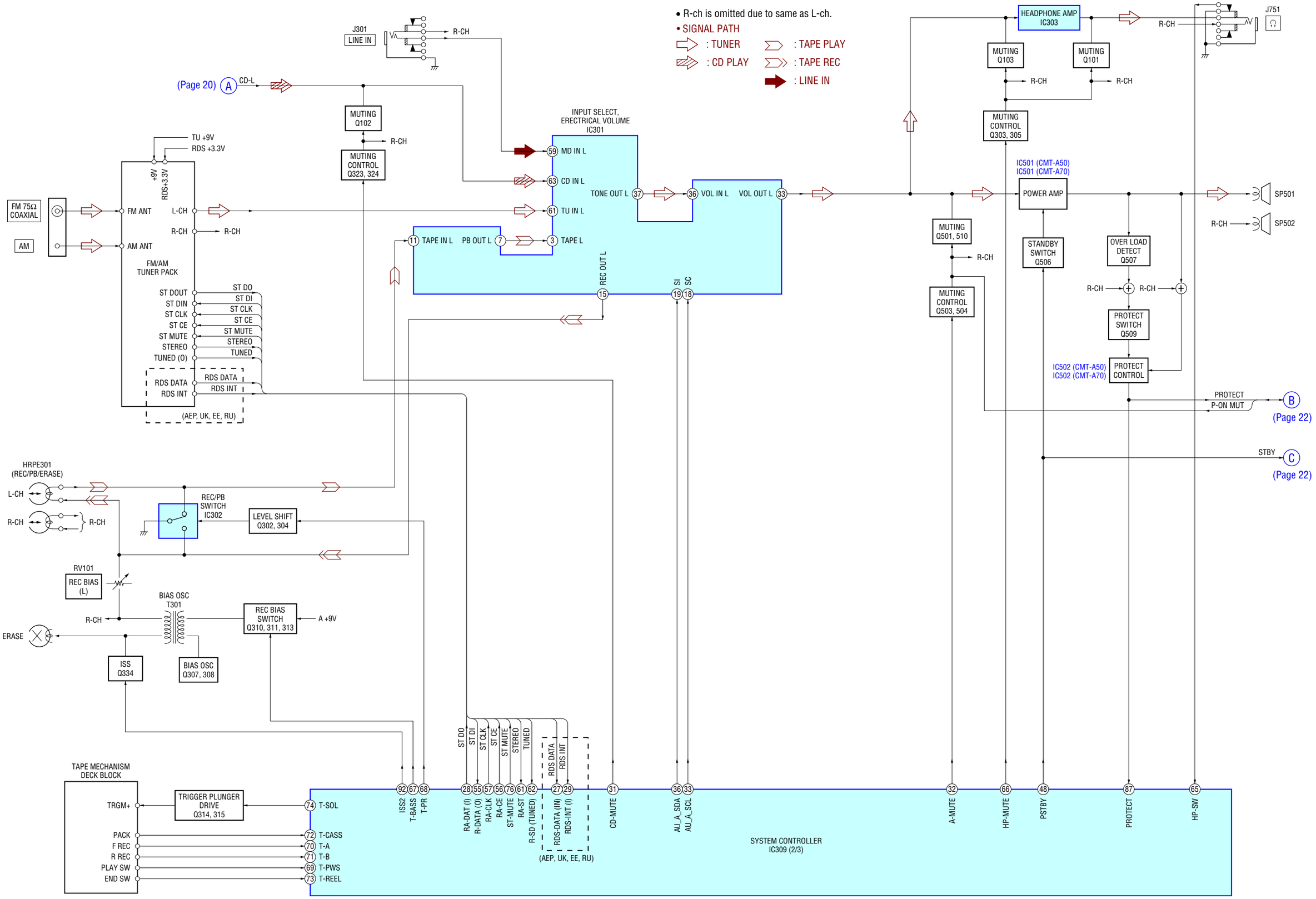
SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM – SERVO Section –

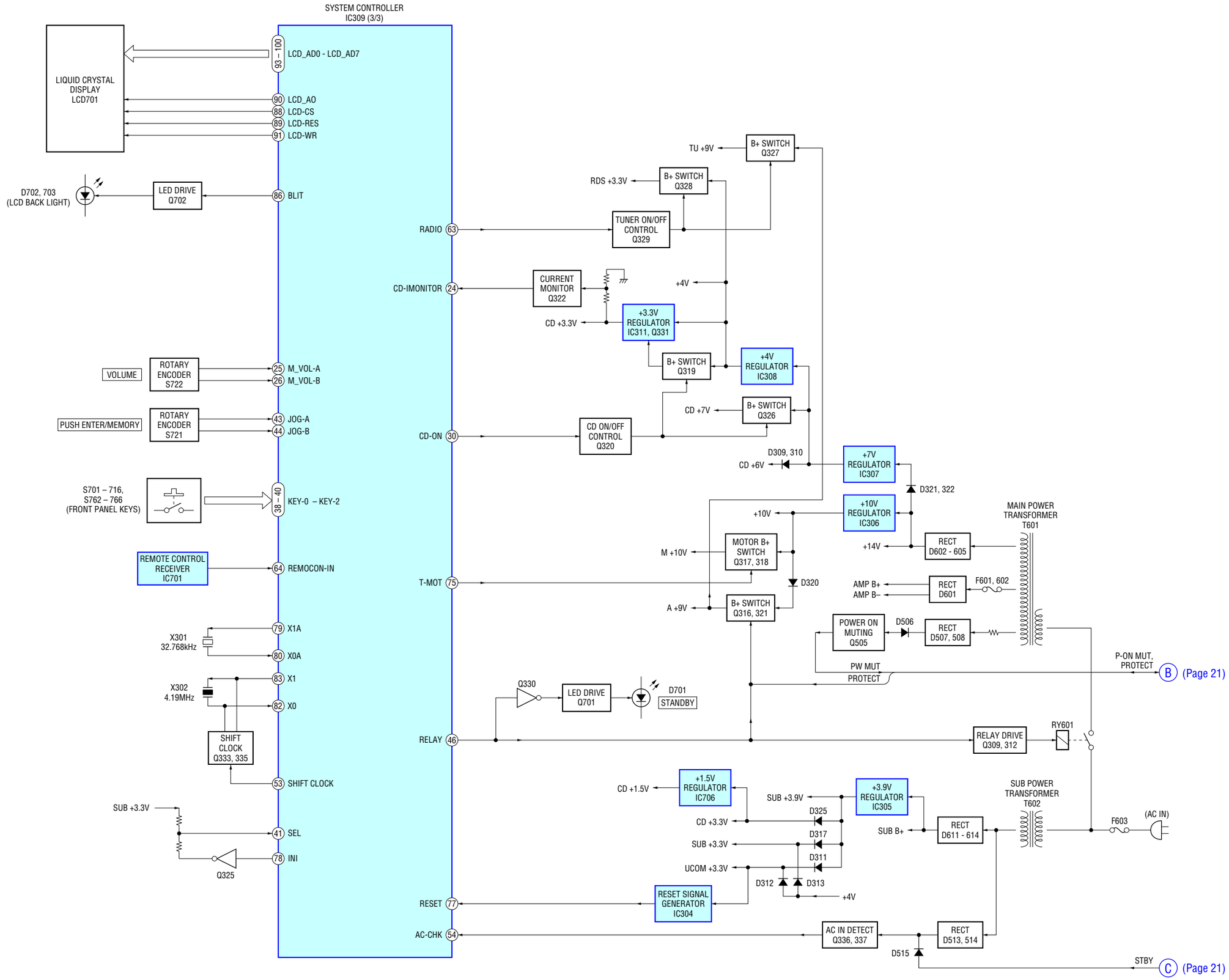


- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  : CD PLAY (ANALOG OUT)
  : CD PLAY (DIGITAL OUT)

6-2. BLOCK DIAGRAM – MAIN Section –



6-3. BLOCK DIAGRAM – PANEL, POWER SUPPLY Section –



• Note for Printed Wiring Boards and Schematic Diagrams

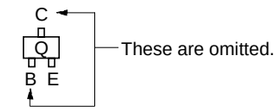
Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- : indicates side identified with part number.
- △ : internal component.
- : Pattern from the side which enables seeing.

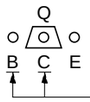
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.



These are omitted.



These are omitted.

Note on Schematic Diagram:

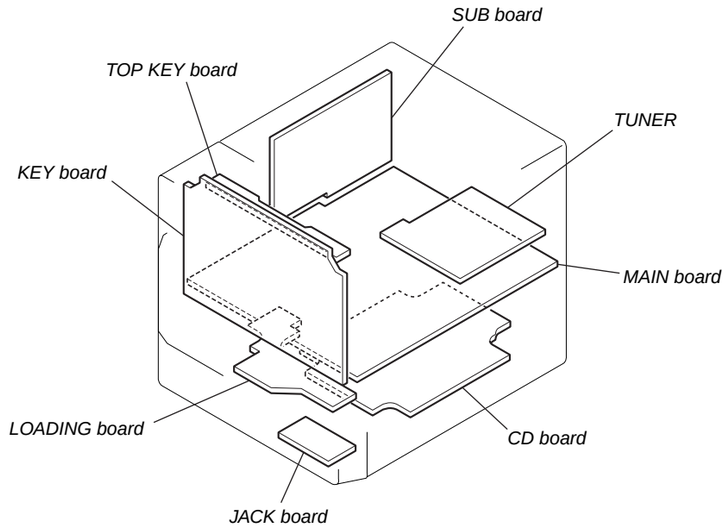
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

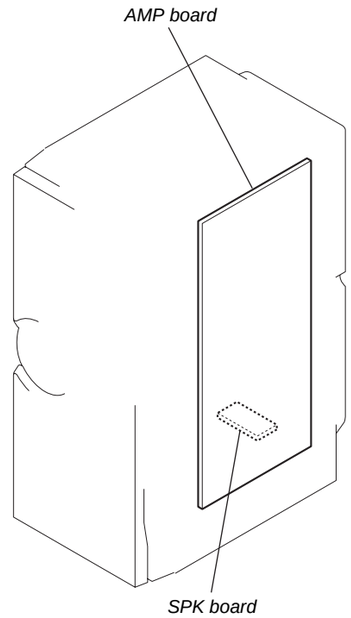
- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  – CD Board –
  no mark : CD PLAY
  – Other Boards –
  no mark : FM
  ( ) : CD PLAY
  [ ] : TAPE PLAY
  ⟨⟨ ⟩⟩ : TAPE REC
  ✳ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : TUNER
  : TAPE PLAY
  : TAPE REC
  : CD PLAY (ANALOG OUT)
  : CD PLAY (DIGITAL OUT)
  : LINE IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  EE : East European model
  IT : Italian model
  KR : Korean model
  RU : Russian model

• Circuit Boards Location

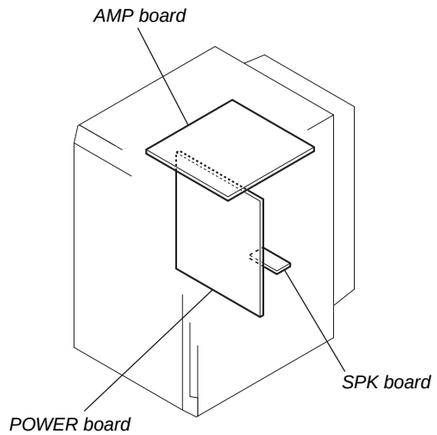
– Main unit –



– Speaker unit (L-CH) (CMT-A50) –



– Speaker unit (L-CH) (CMT-A70) –



6-4. PRINTED WIRING BOARD – CD Board –

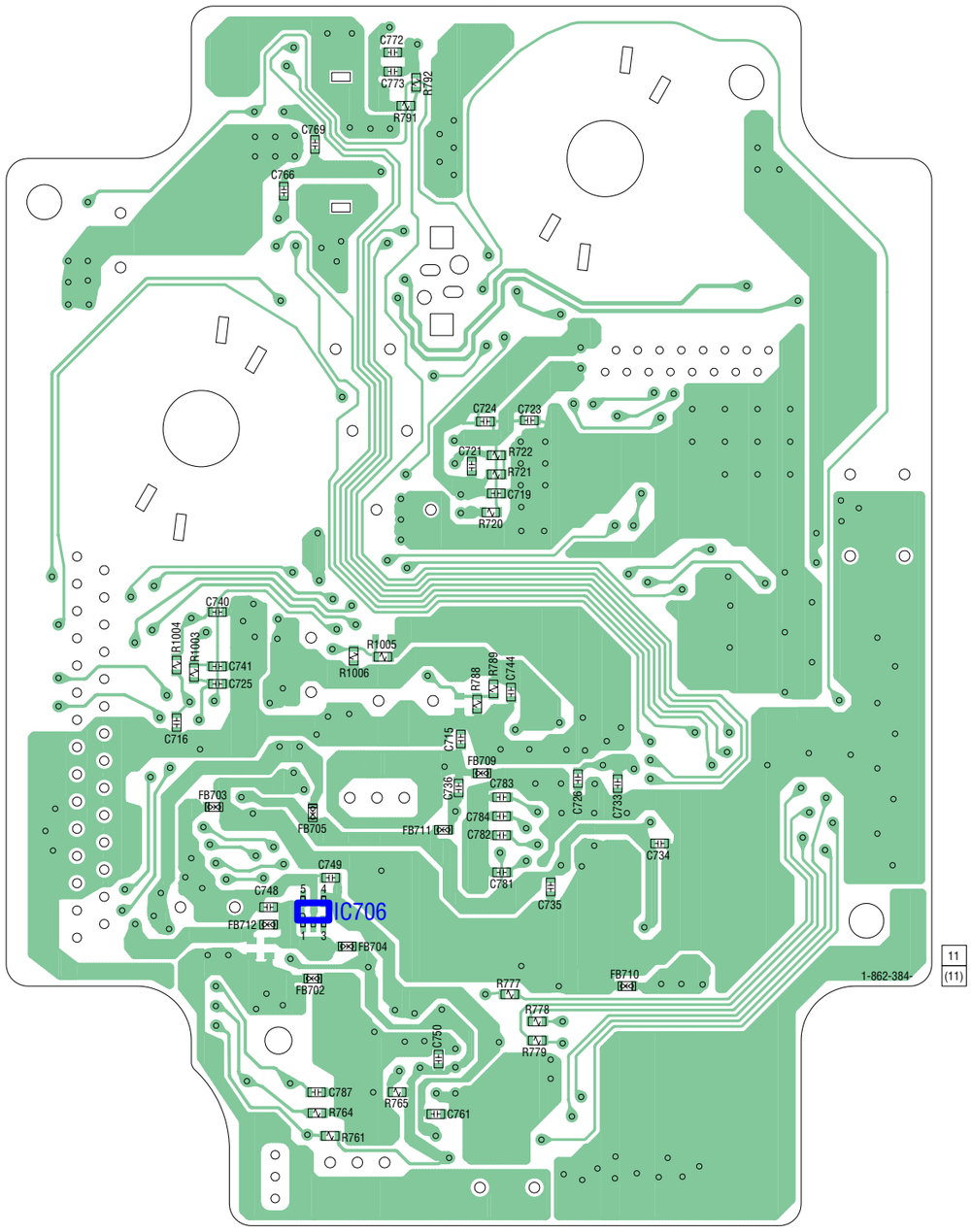
• See page 23 for Circuit Boards Location.

: Uses unleaded solder.

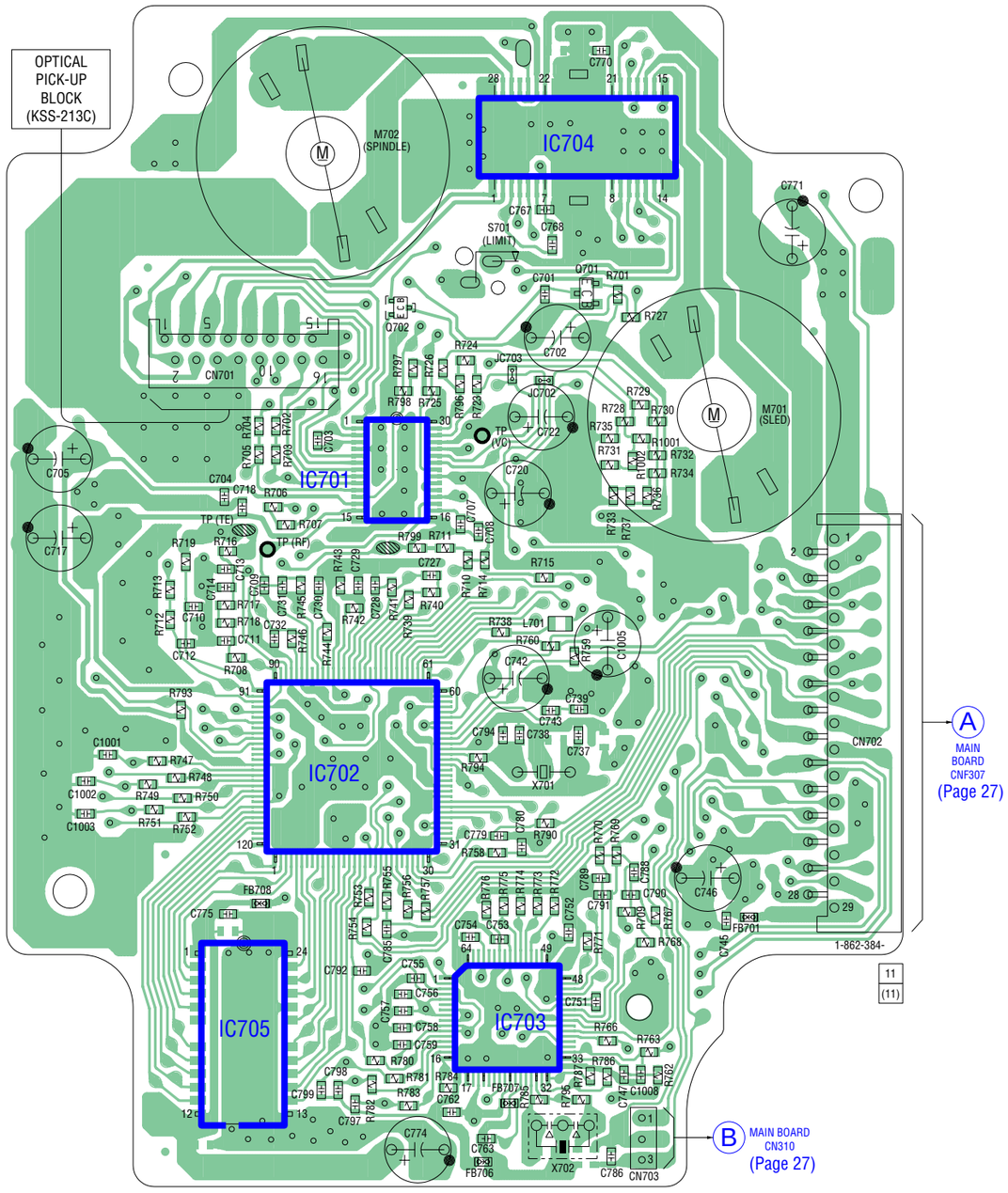
• **Semiconductor Location**

Ref. No.	Location
IC701	E-11
IC702	G-11
IC703	I-12
IC704	B-13
IC705	I-10
IC706	H-3
Q701	C-13
Q702	C-11

【CD BOARD】(COMPONENT SIDE)



【CD BOARD】(CONDUCTOR SIDE)



6-5. SCHEMATIC DIAGRAM – CD Board –

• See page 40 for Waveforms. • See page 40 for IC Block Diagrams. • See page 45 for IC Pin Function Description.

【CD BOARD】

OPTICAL PICK-UP BLOCK (KSS-213C)

IC702 CD DSP IC702 CXD3029R

IC706 +1.5V REGULATOR IC706 S-T111B15MC

IC703 MP3 DECODER IC703 CXR710160-209R

IC704 COIL/MOTOR DRIVE IC704 BA5946FP-E2

IC705 D-RAM IC705 MSM51V17400F -10TK-FS

IC701 RF AMP,FOCUS/TRACKING ERROR AMP IC701 CXA2647N

(Page 29)

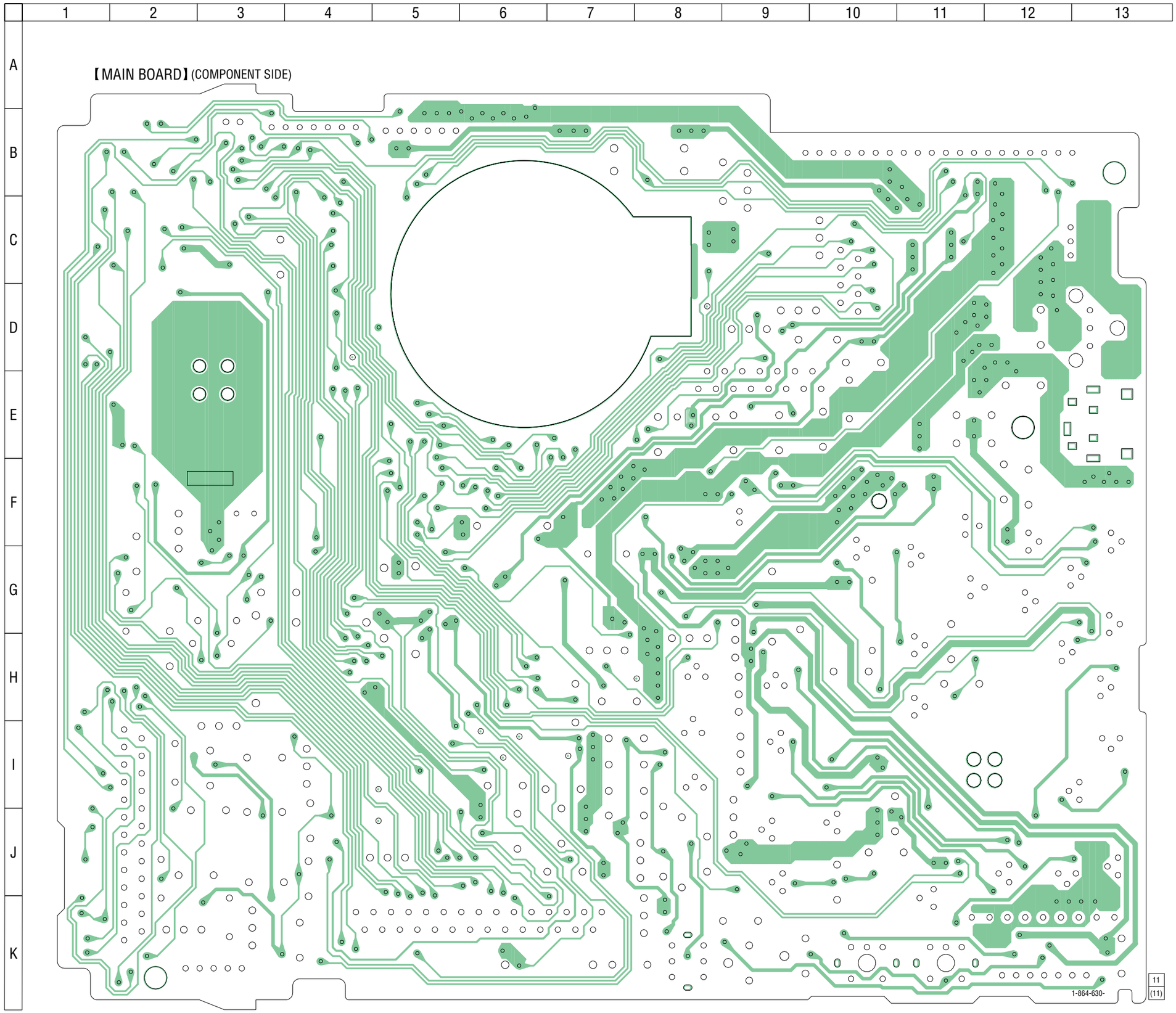
(Page 29)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-6. PRINTED WIRING BOARD – MAIN Board (Component Side) –

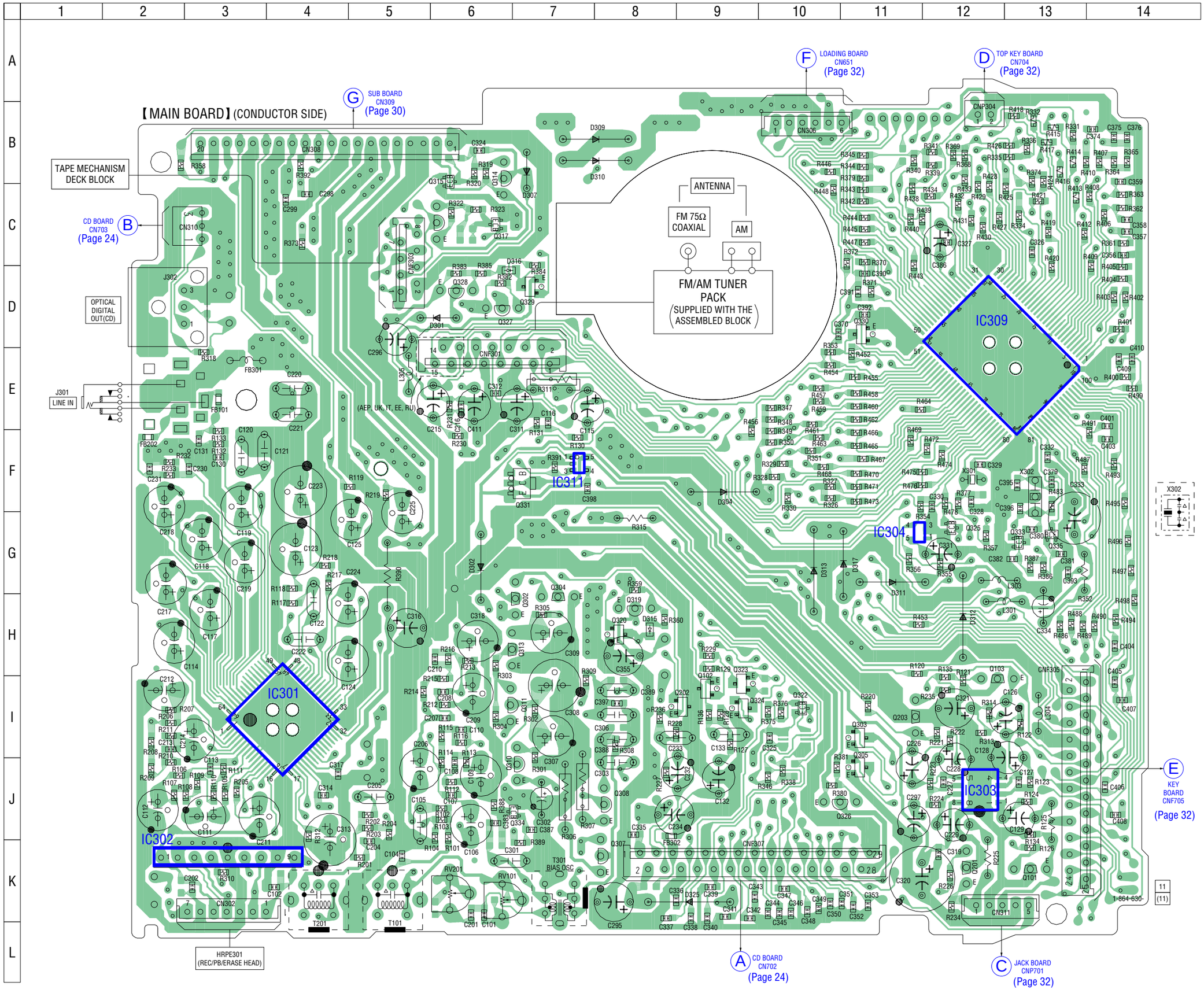
• See page 23 for Circuit Boards Location.

: Uses unleaded solder.



6-7. PRINTED WIRING BOARD – MAIN Board (Conductor Side) –

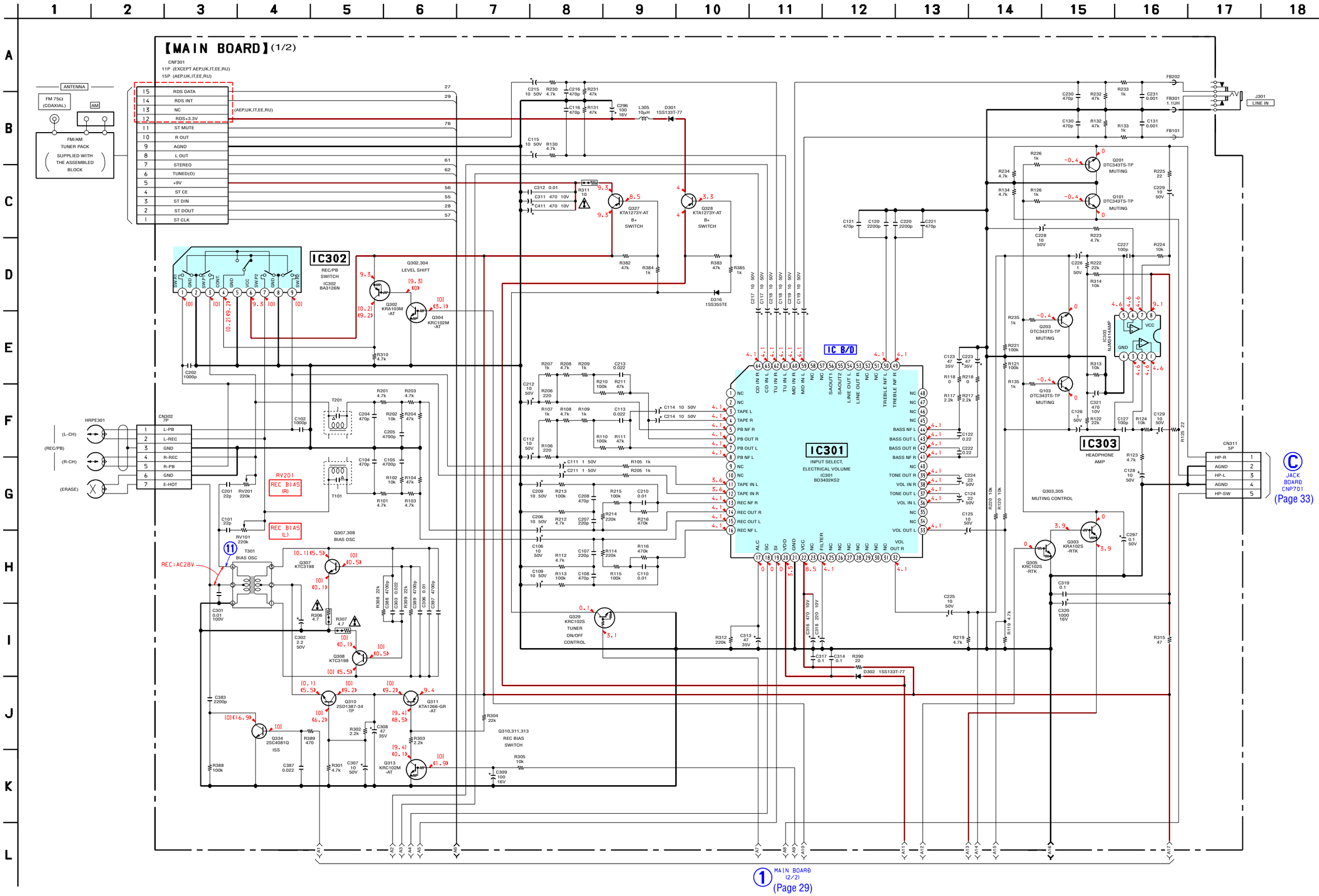
• See page 23 for Circuit Boards Location. : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D301	D-6
D302	G-6
D304	F-9
D307	B-7
D309	B-8
D310	B-8
D311	G-11
D312	H-12
D313	G-10
D315	H-8
D316	D-6
D317	G-11
D325	K-9
IC301	I-4
IC302	I-3
IC303	J-12
IC304	G-11
IC309	D-12
IC311	F-7
Q101	K-13
Q102	I-9
Q103	I-12
Q201	K-12
Q202	I-9
Q203	I-11
Q302	H-7
Q303	I-11
Q304	H-7
Q305	J-11
Q307	K-8
Q308	J-8
Q310	J-7
Q311	I-7
Q313	H-7
Q314	B-6
Q315	B-6
Q317	C-6
Q318	C-6
Q319	H-8
Q320	H-8
Q322	I-10
Q323	I-9
Q324	I-9
Q325	G-12
Q326	J-10
Q327	D-6
Q328	D-6
Q329	D-7
Q330	D-11
Q331	F-7
Q333	G-13
Q334	J-7
Q335	G-13

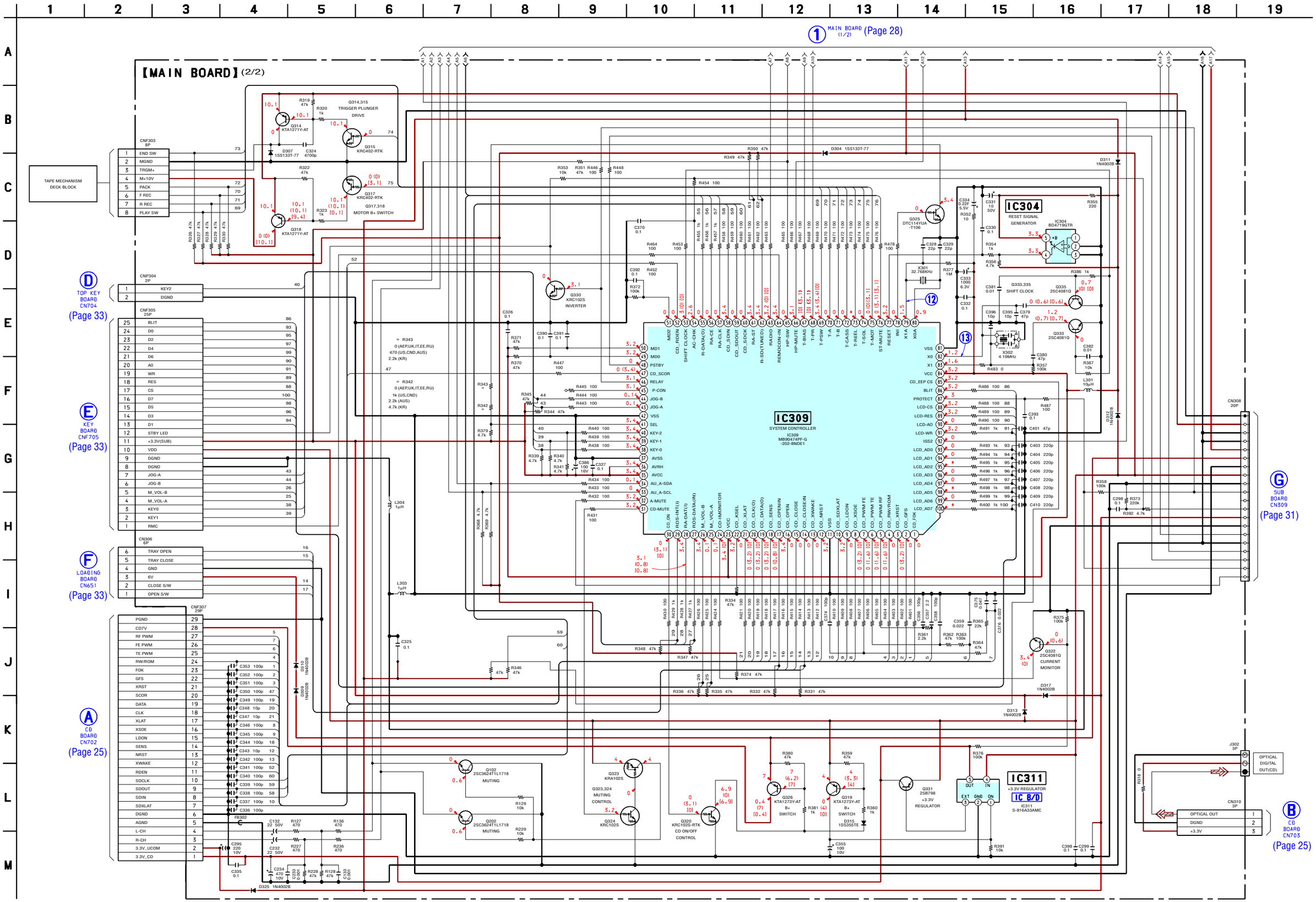
6-8. SCHEMATIC DIAGRAM – MAIN Board (1/2) – • See page 40 for Waveforms. • See page 40 for IC Block Diagrams.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-9. SCHEMATIC DIAGRAM – MAIN Board (2/2) –

• See page 40 for Waveforms. • See page 40 for IC Block Diagrams. • See page 45 for IC Pin Function Description.



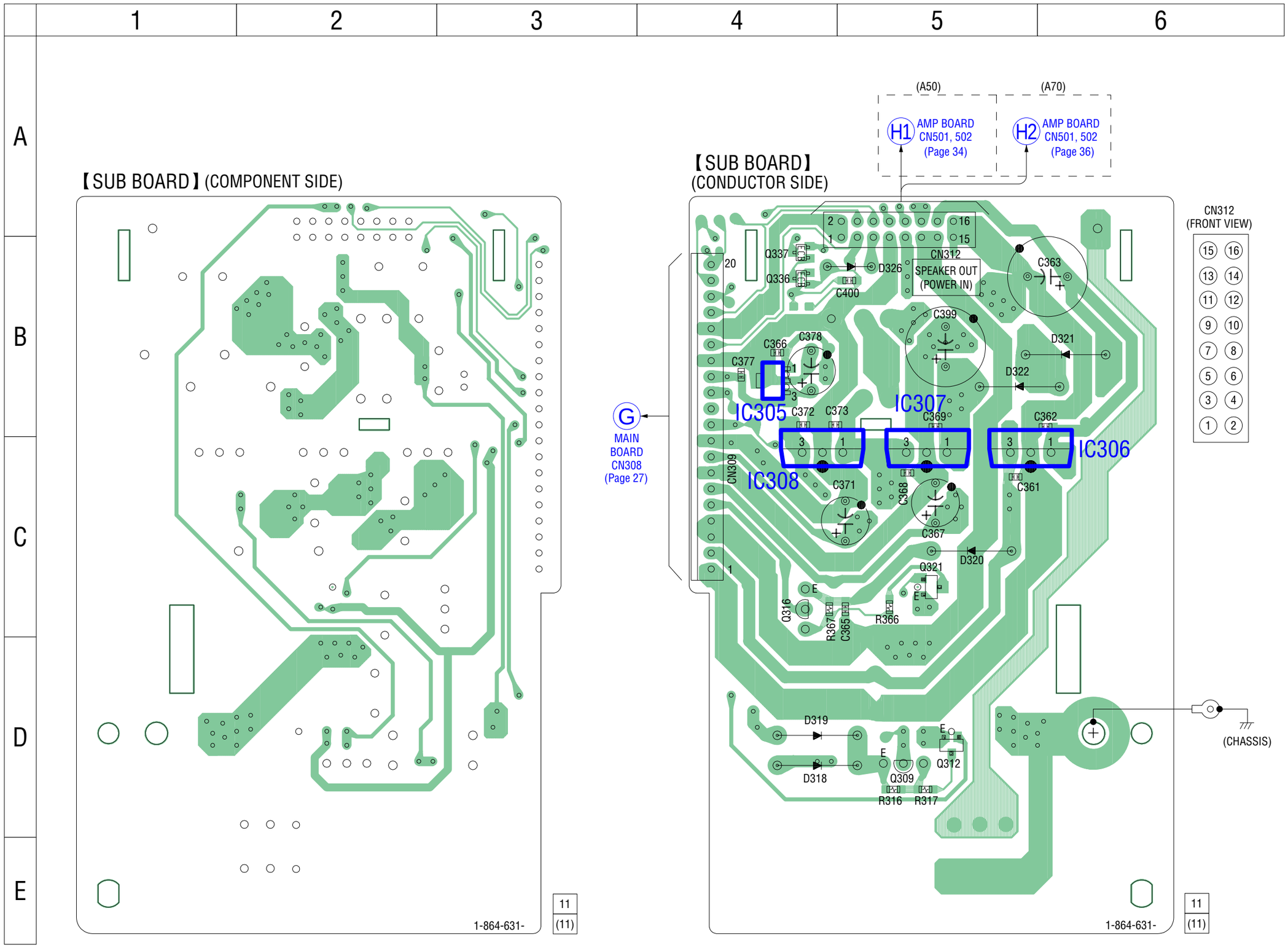
6-10. PRINTED WIRING BOARD – SUB Board –

• See page 23 for Circuit Boards Location.

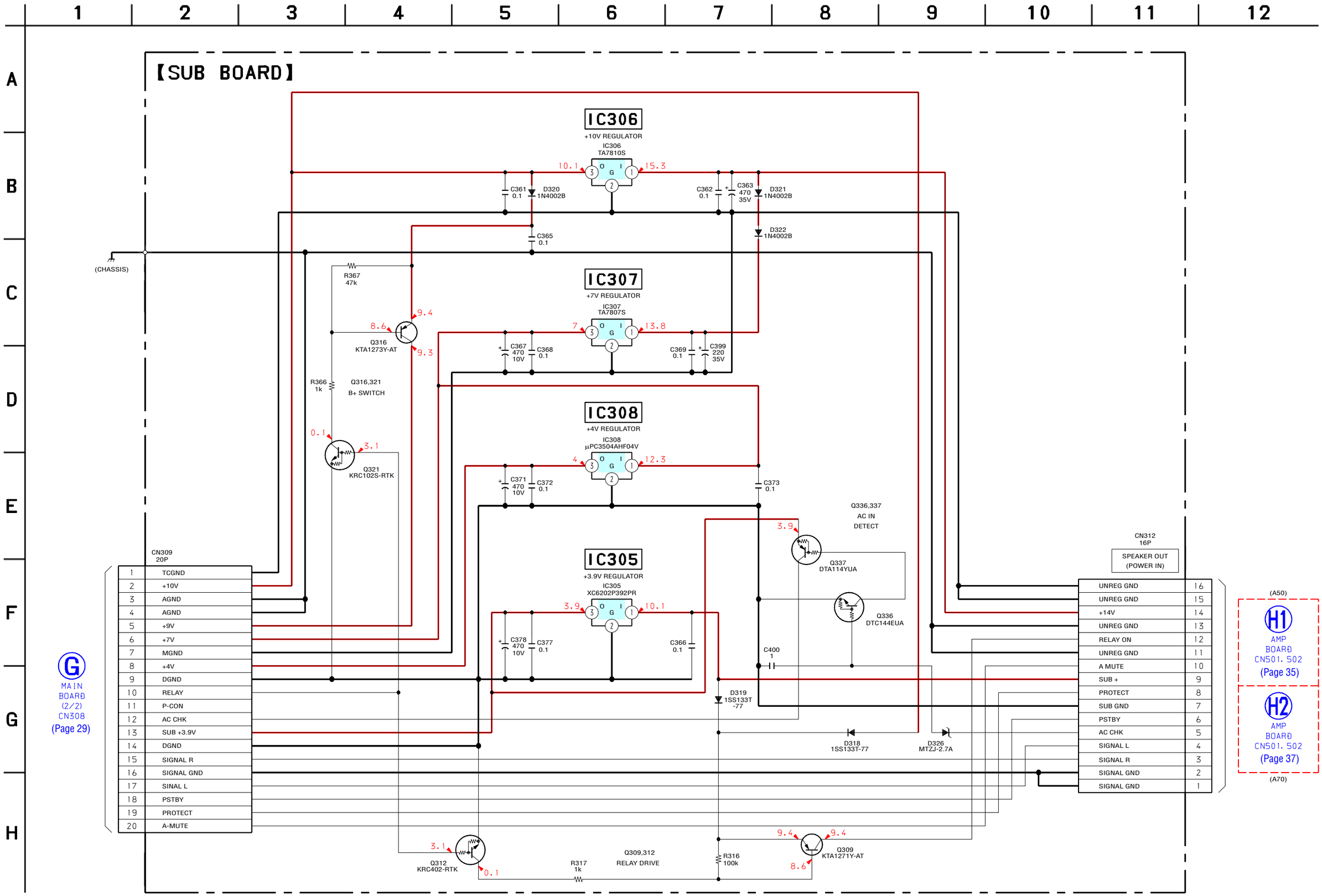
: Uses unleaded solder.

• **Semiconductor Location**

Ref. No.	Location
D318	D-4
D319	D-4
D320	C-5
D321	B-6
D322	B-5
D326	B-5
IC305	B-4
IC306	C-6
IC307	C-5
IC308	C-4
Q309	D-5
Q312	D-5
Q316	C-4
Q321	C-5
Q336	B-4
Q337	B-4

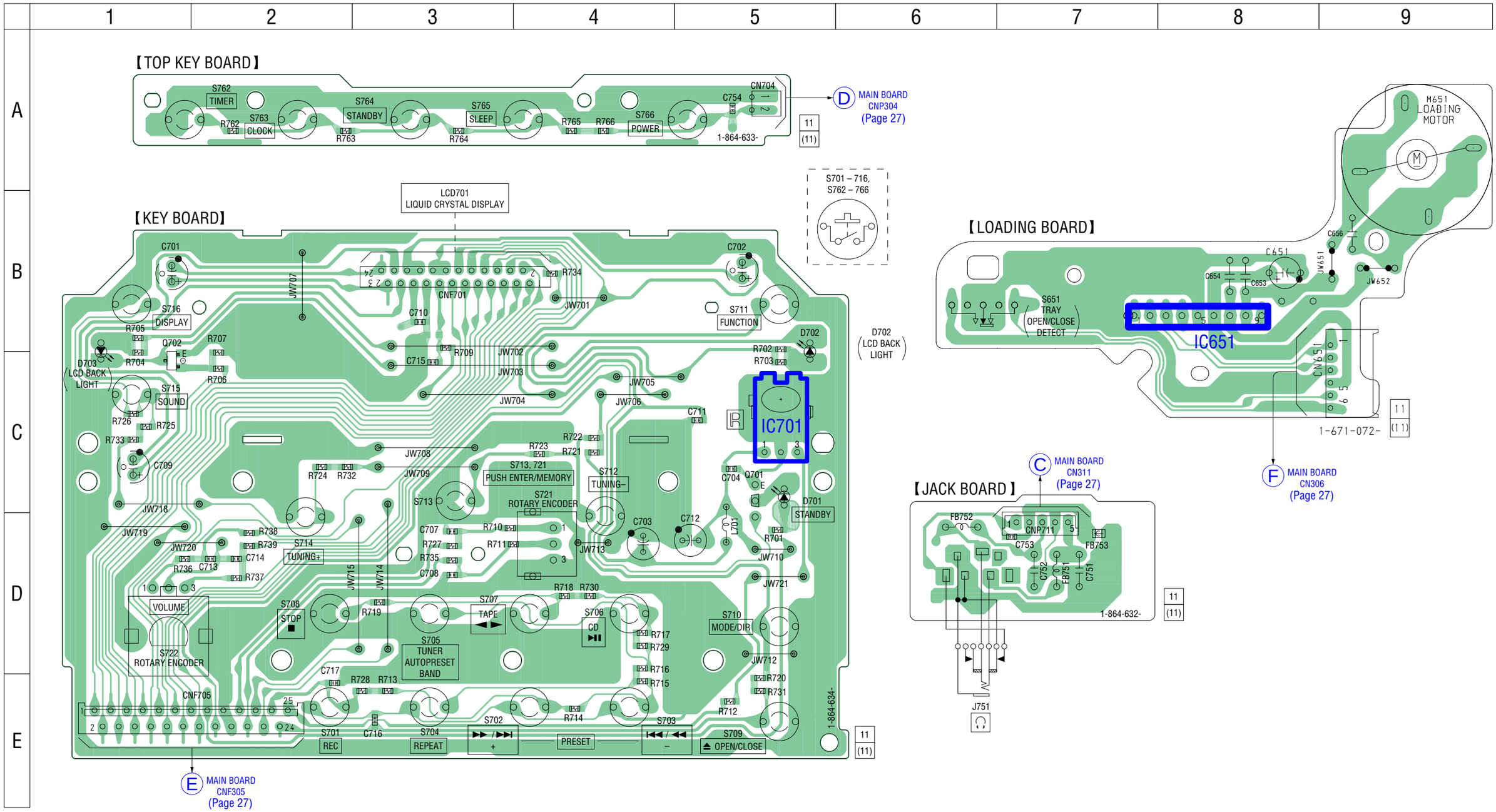


6-11. SCHEMATIC DIAGRAM – SUB Board –



6-12. PRINTED WIRING BOARDS – PANEL, MOTOR Section –

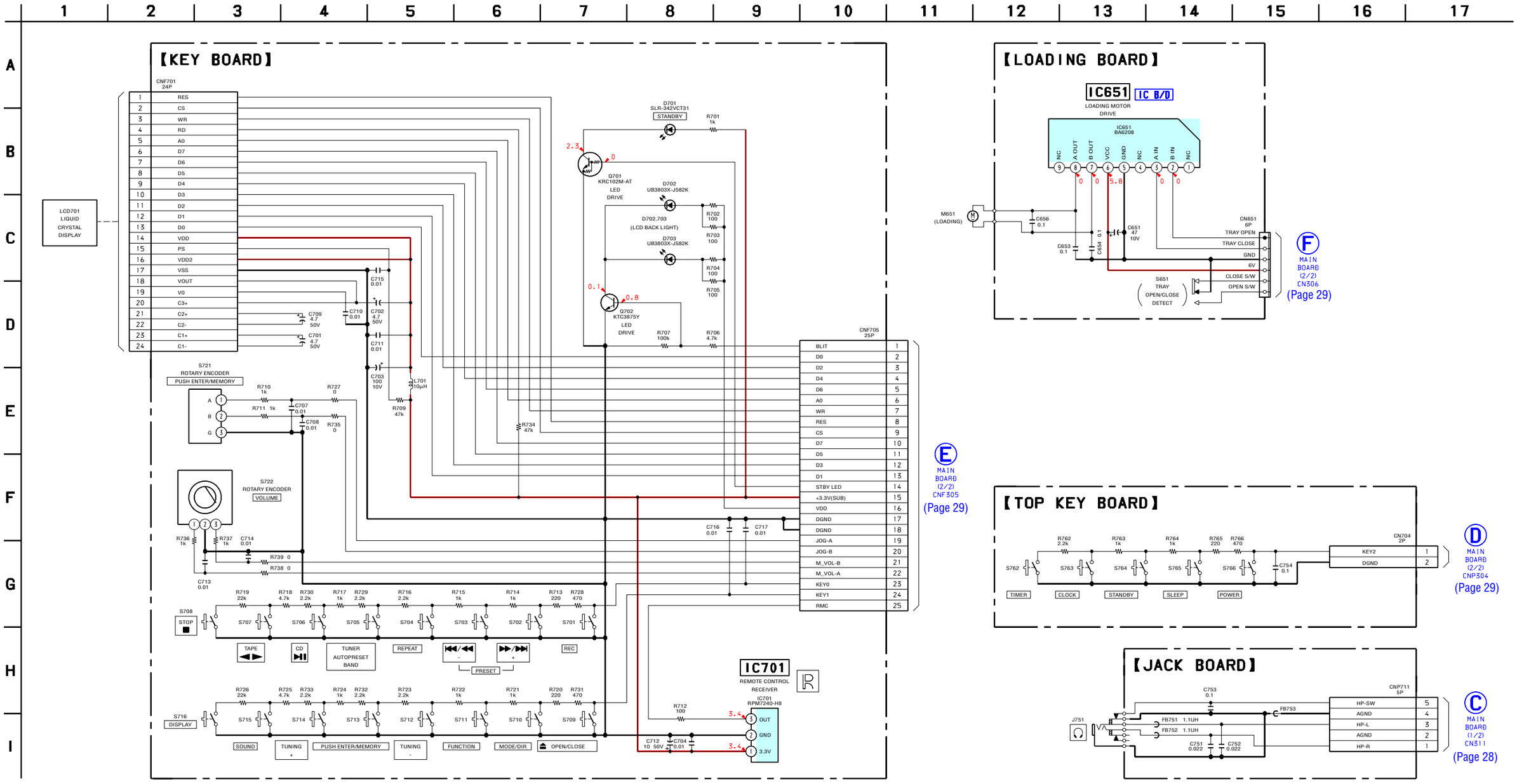
• See page 23 for Circuit Boards Location. : Uses unleaded solder.



- **Semiconductor Location**

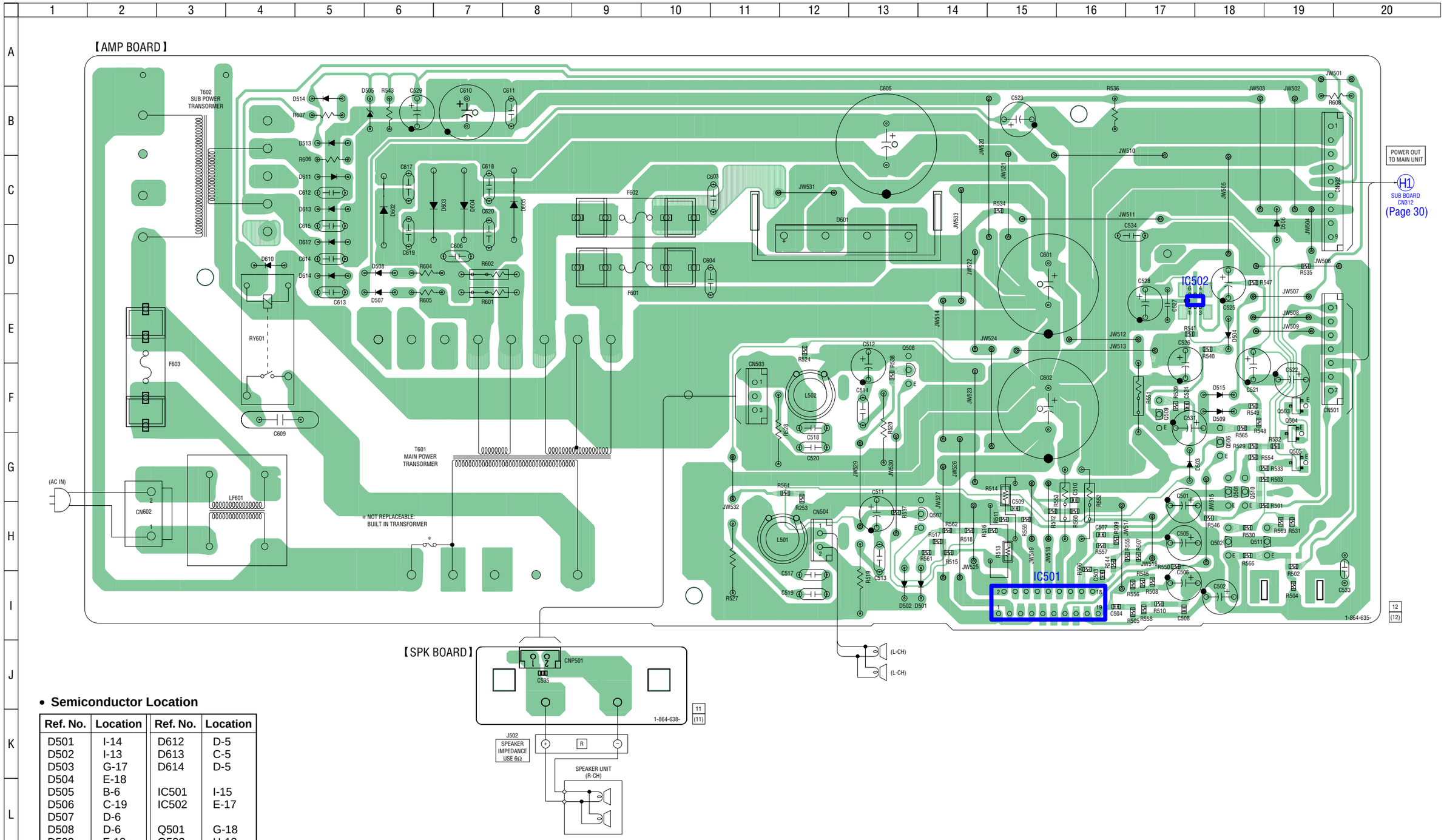
Ref. No.	Location
D701	C-5
D702	B-5
D703	C-1
IC651	B-8
IC701	C-5
Q701	C-5
Q702	C-1

6-13. SCHEMATIC DIAGRAM – PANEL, MOTOR Section – • See page 40 for IC Block Diagrams.



6-14. PRINTED WIRING BOARDS – AMP, POWER SUPPLY Section (CMT-A50 only) –

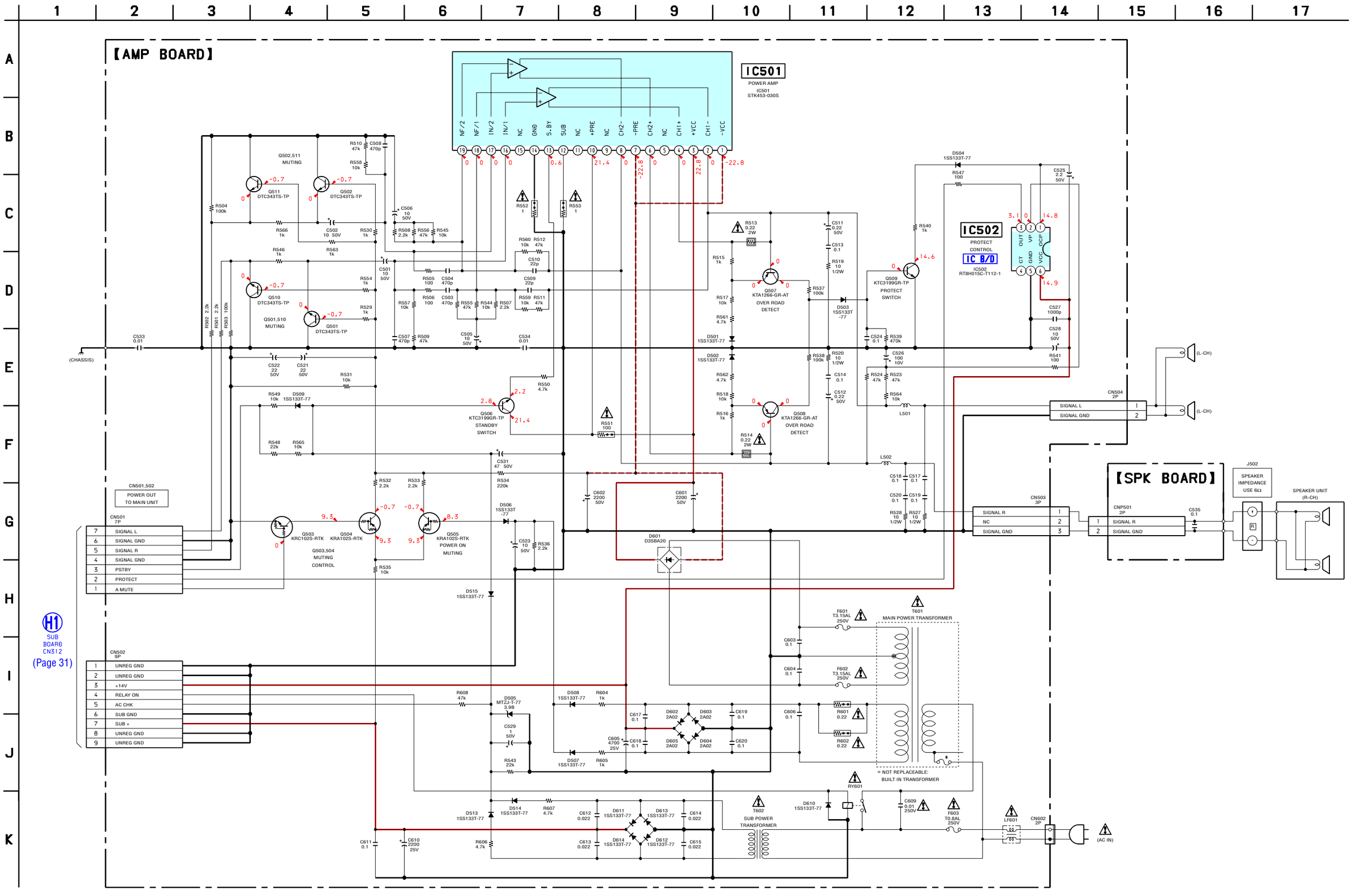
• See page 23 for Circuit Boards Location. : Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D501	I-14	D612	D-5
D502	I-13	D613	C-5
D503	G-17	D614	D-5
D504	E-18		
D505	B-6	IC501	I-15
D506	C-19	IC502	E-17
D507	D-6		
D508	D-6	Q501	G-18
D509	F-18	Q502	H-18
D513	B-5	Q503	F-19
D514	B-5	Q504	G-19
D515	F-18	Q505	G-19
D601	D-12	Q506	G-18
D602	C-6	Q507	H-14
D603	C-6	Q508	F-13
D604	C-7	Q509	F-17
D605	C-8	Q510	G-18
D610	D-4	Q511	H-19
D611	C-5		

6-15. SCHEMATIC DIAGRAM – AMP, POWER SUPPLY Section (CMT-A50 only) – • See page 40 for IC Block Diagrams.



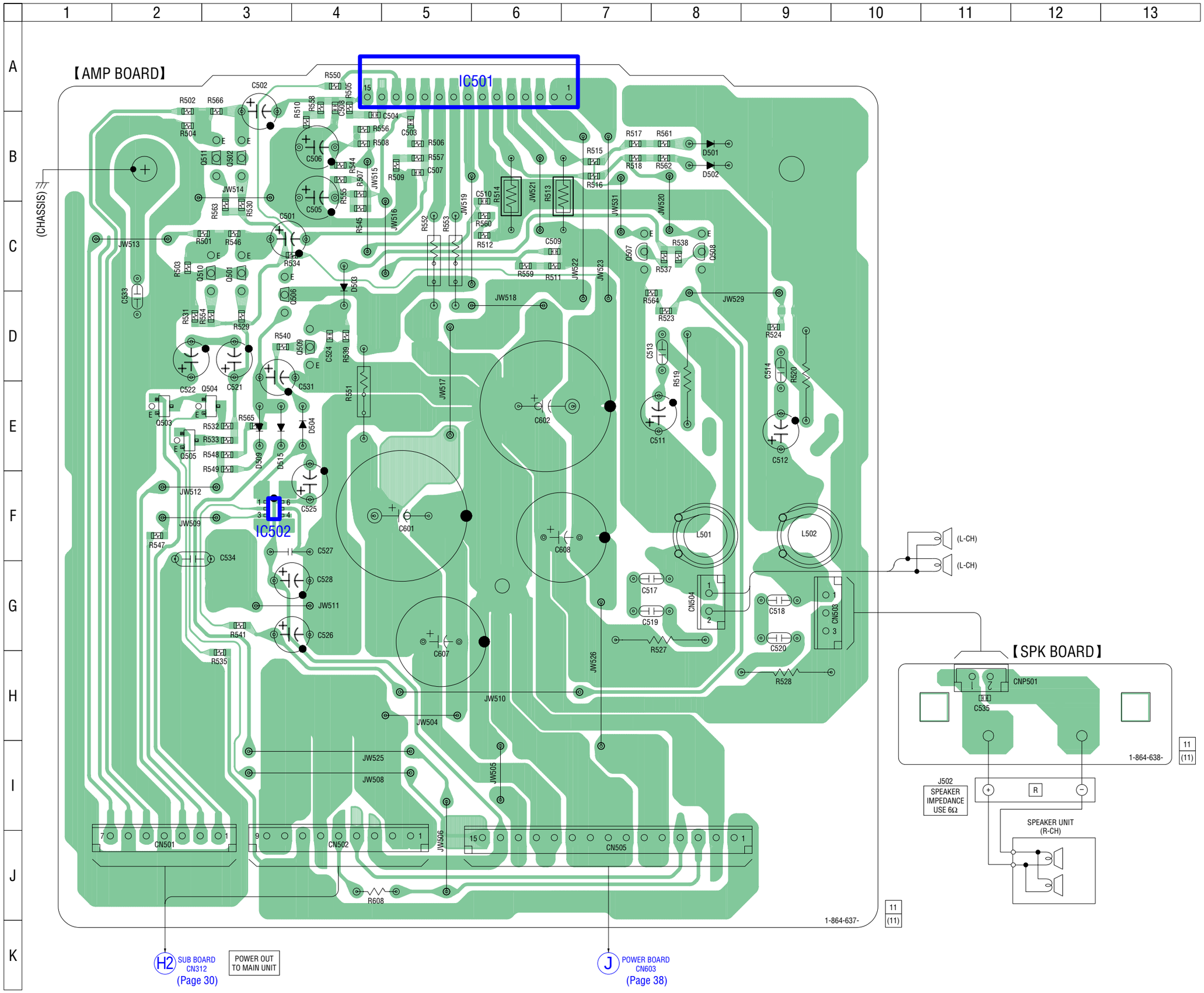
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-16. PRINTED WIRING BOARDS – AMP Section (CMT-A70 only) –

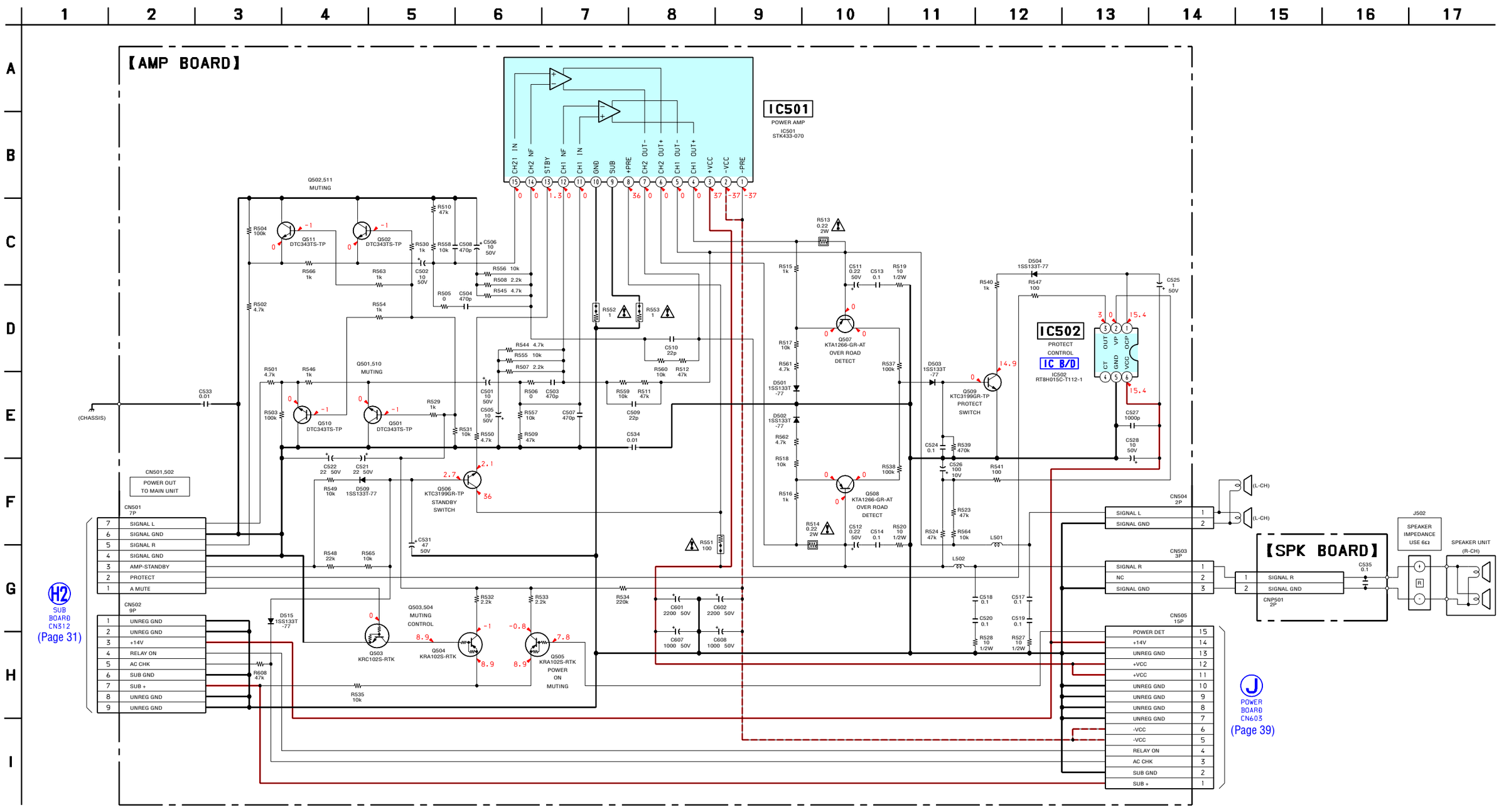
• See page 23 for Circuit Boards Location. : Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D501	B-8
D502	B-8
D503	C-4
D504	E-4
D509	E-3
D515	E-3
IC501	A-5
IC502	F-3
Q501	C-3
Q502	B-3
Q503	E-2
Q504	E-3
Q505	E-2
Q506	D-3
Q507	C-7
Q508	C-8
Q509	D-4
Q510	C-3
Q511	B-3



6-17. SCHEMATIC DIAGRAM – AMP Section (CMT-A70 only) – • See page 40 for IC Block Diagrams.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

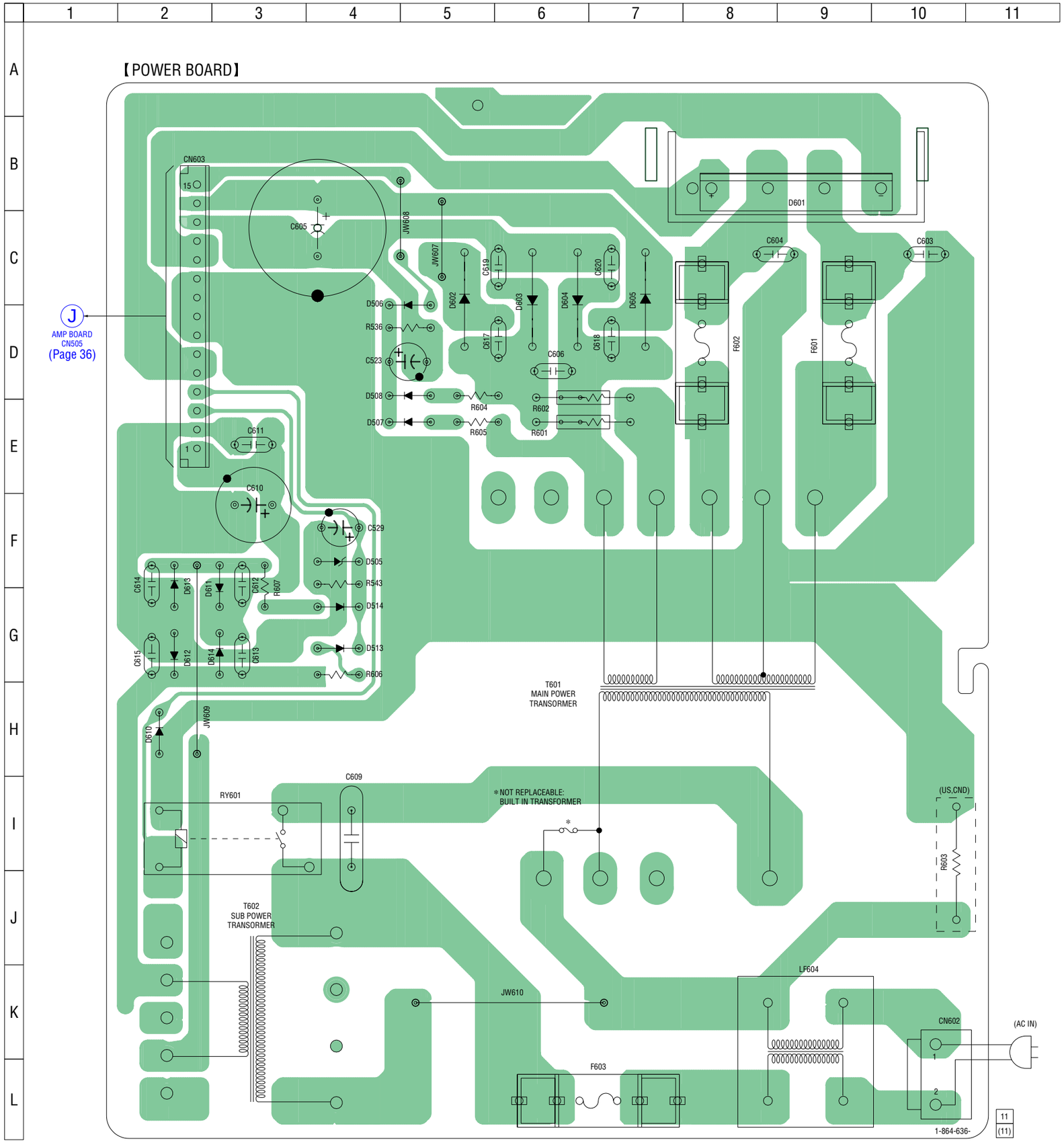
6-18. PRINTED WIRING BOARD – POWER SUPPLY Section (CMT-A70 only) –

• See page 23 for Circuit Boards Location.

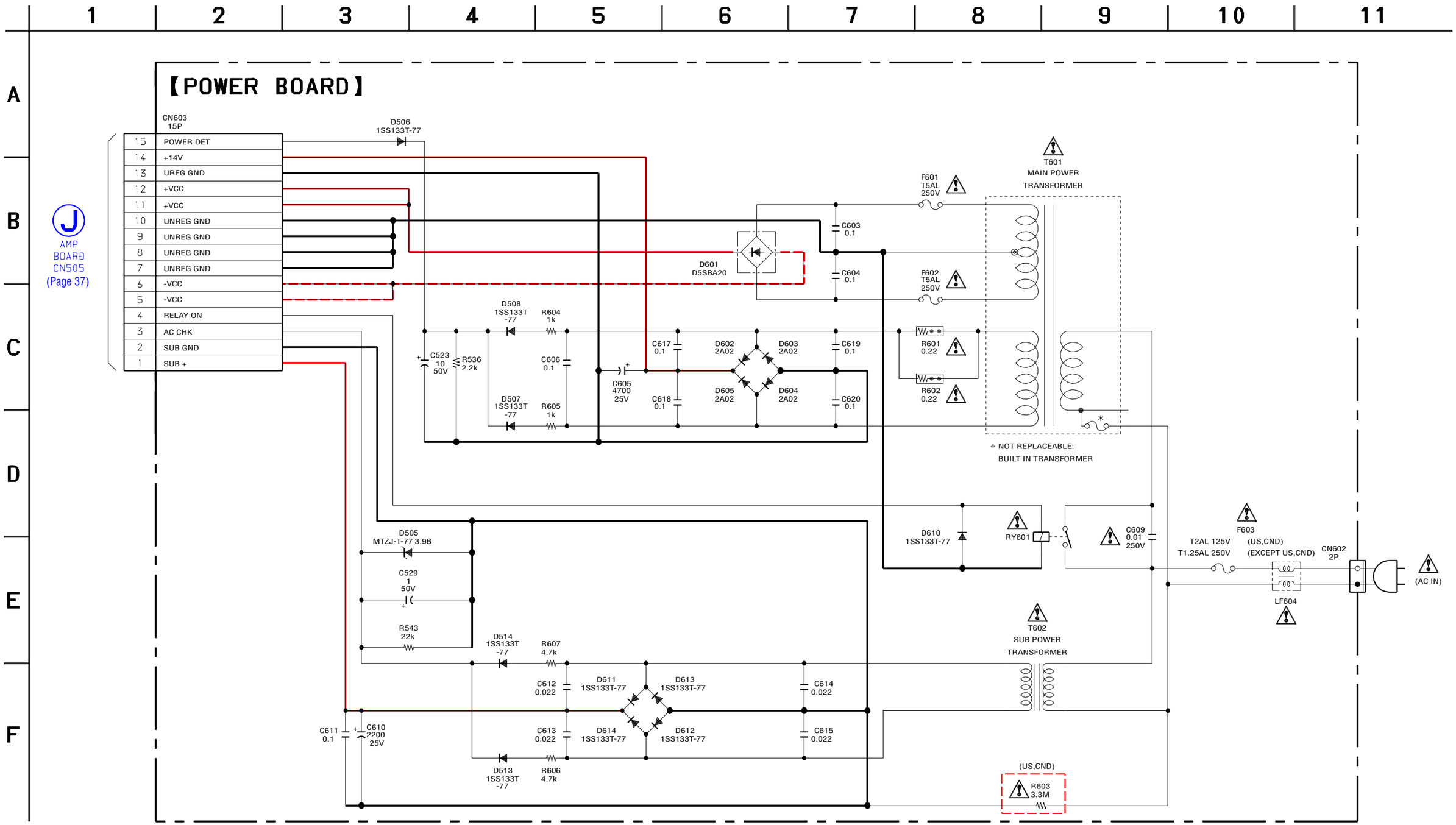
: Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D505	F-4
D506	D-5
D507	E-5
D508	D-5
D513	G-3
D514	G-4
D601	B-9
D602	C-5
D603	C-6
D604	C-6
D605	C-7
D610	H-2
D611	G-3
D612	G-2
D613	F-2
D614	G-3



6-19. SCHEMATIC DIAGRAM – POWER SUPPLY Section (CMT-A70 only) –

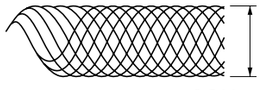


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• Waveforms

– CD Board –

① IC701 ⑮ (RFAC) (CD play mode)



0.8 Vp-p

500 mV/DIV, 200 ns/DIV

② IC701 ⑯ (FE) (CD play mode)

Approx. 140 mVp-p

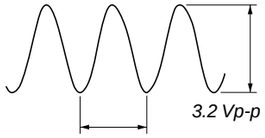
100 mV/DIV, 200 ns/DIV

③ IC701 ⑱ (TE) (CD play mode)

Approx. 360 mVp-p

200 mV/DIV, 200 ns/DIV

④ IC702 ㊽ (XTAO) (CD play mode)

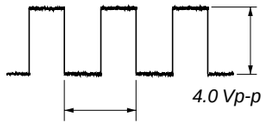


3.2 Vp-p

59 ns

1 V/DIV, 20 ns/DIV

⑤ IC702 ⑱⑥ (LRCK) (MP3 play mode)

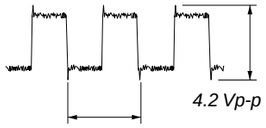


4.0 Vp-p

22.6 µs

2 V/DIV, 10 ms/DIV

⑥ IC702 ⑪⓪ (BCK) (MP3 play mode)

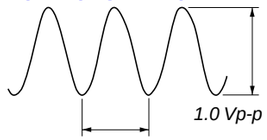


4.2 Vp-p

470 µs

2 V/DIV, 200 ns/DIV

⑦ IC703 ㉙ (EXTAL) (MP3 play mode)



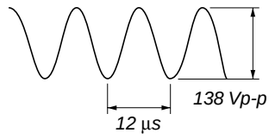
1.0 Vp-p

44.4 ns

500 mV/DIV, 20 ns/DIV

– MAIN Board –

⑪ T301 ④ (REC mode)

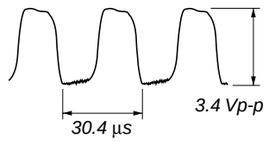


138 Vp-p

12 µs

50 V/DIV, 5 µs/DIV

⑫ IC309 ⑦⑨ (X1A)

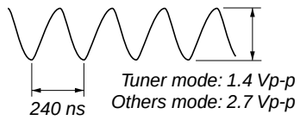


3.4 Vp-p

30.4 µs

2 V/DIV, 20 µs/DIV

⑬ IC309 ⑧② (X0)



Tuner mode: 1.4 Vp-p
Others mode: 2.7 Vp-p

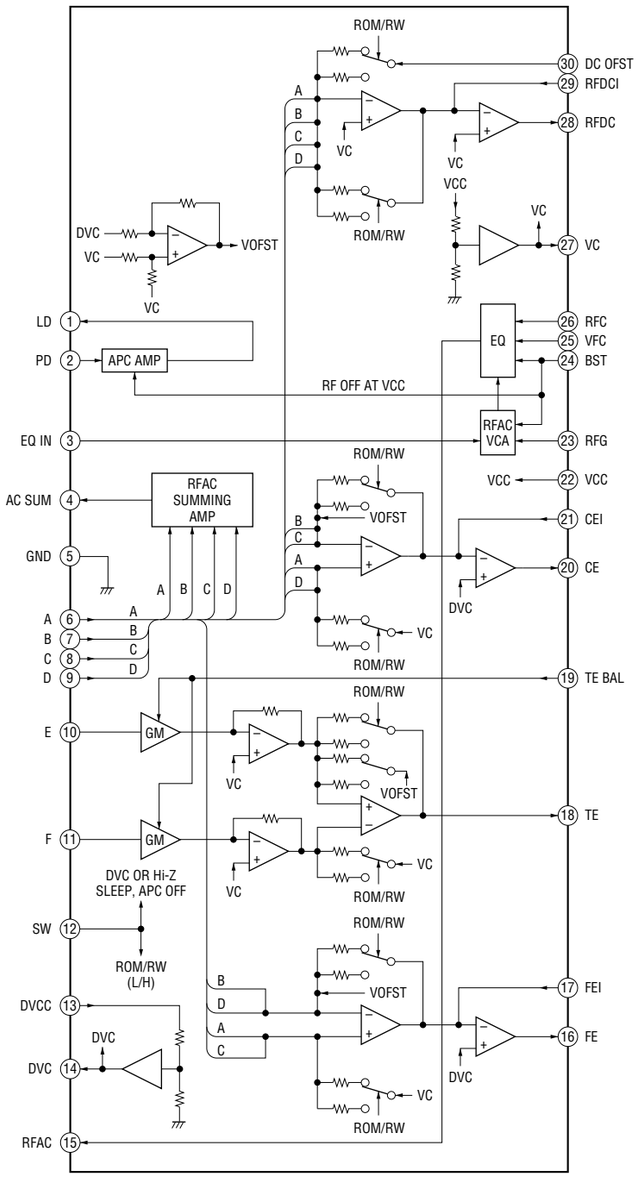
240 ns

1 V/DIV, 100 ns/DIV

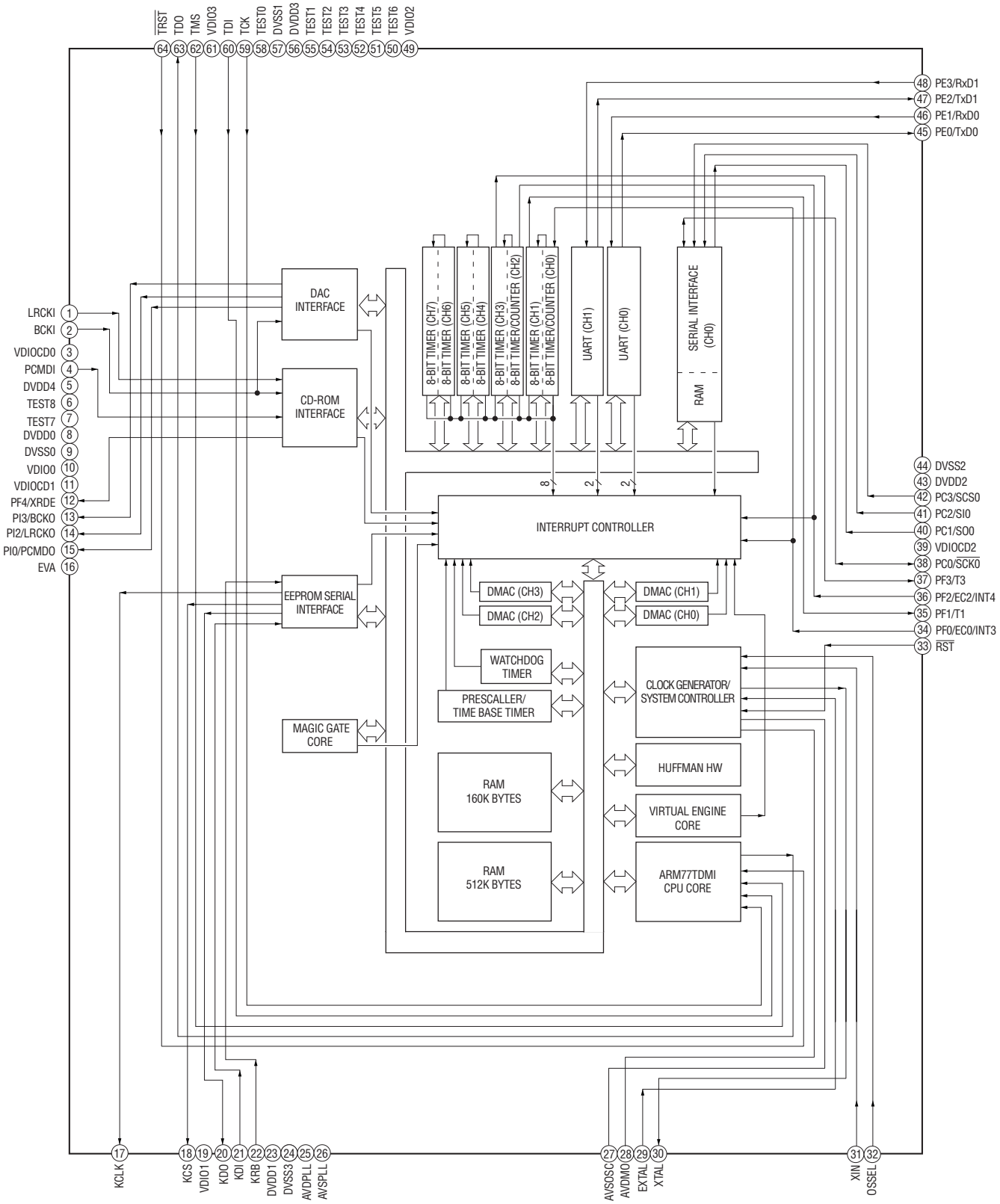
• IC Block Diagrams

– CD Board –

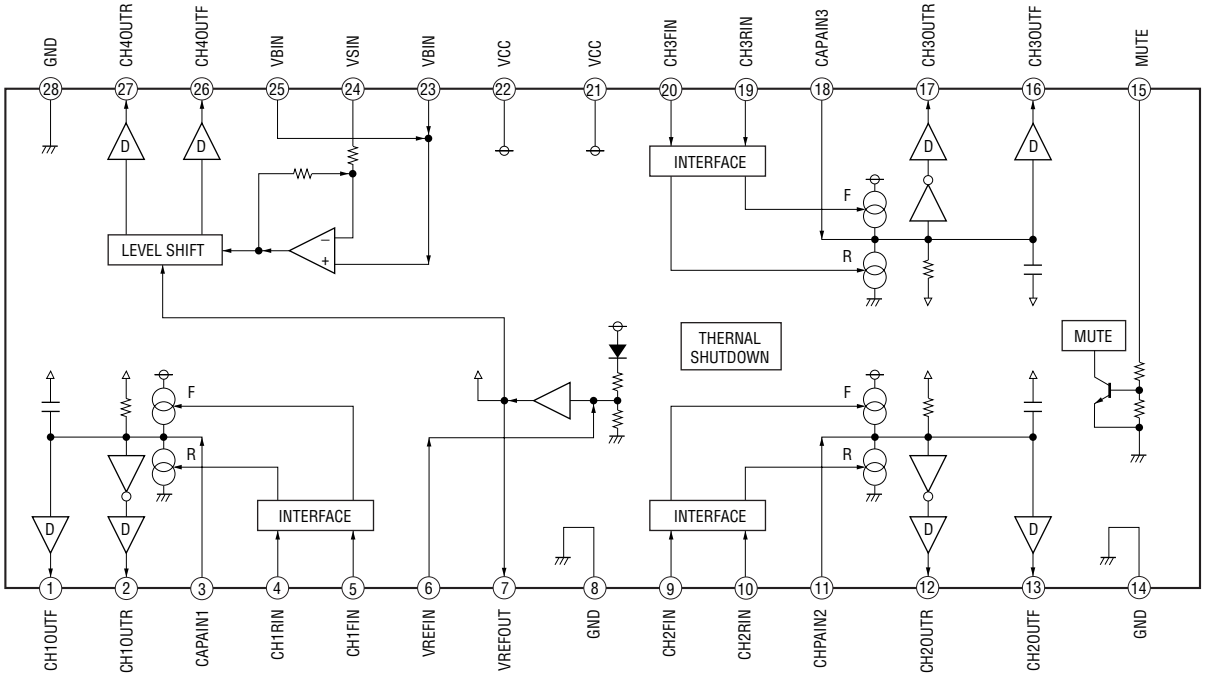
IC701 CXA2647N-T4



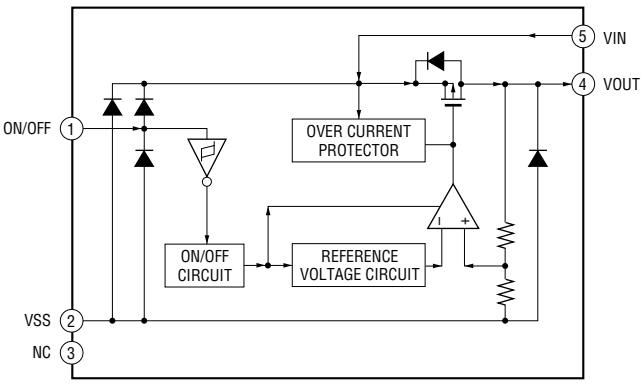
IC703 CXR710160-209R



IC704 BA5946FP-E2

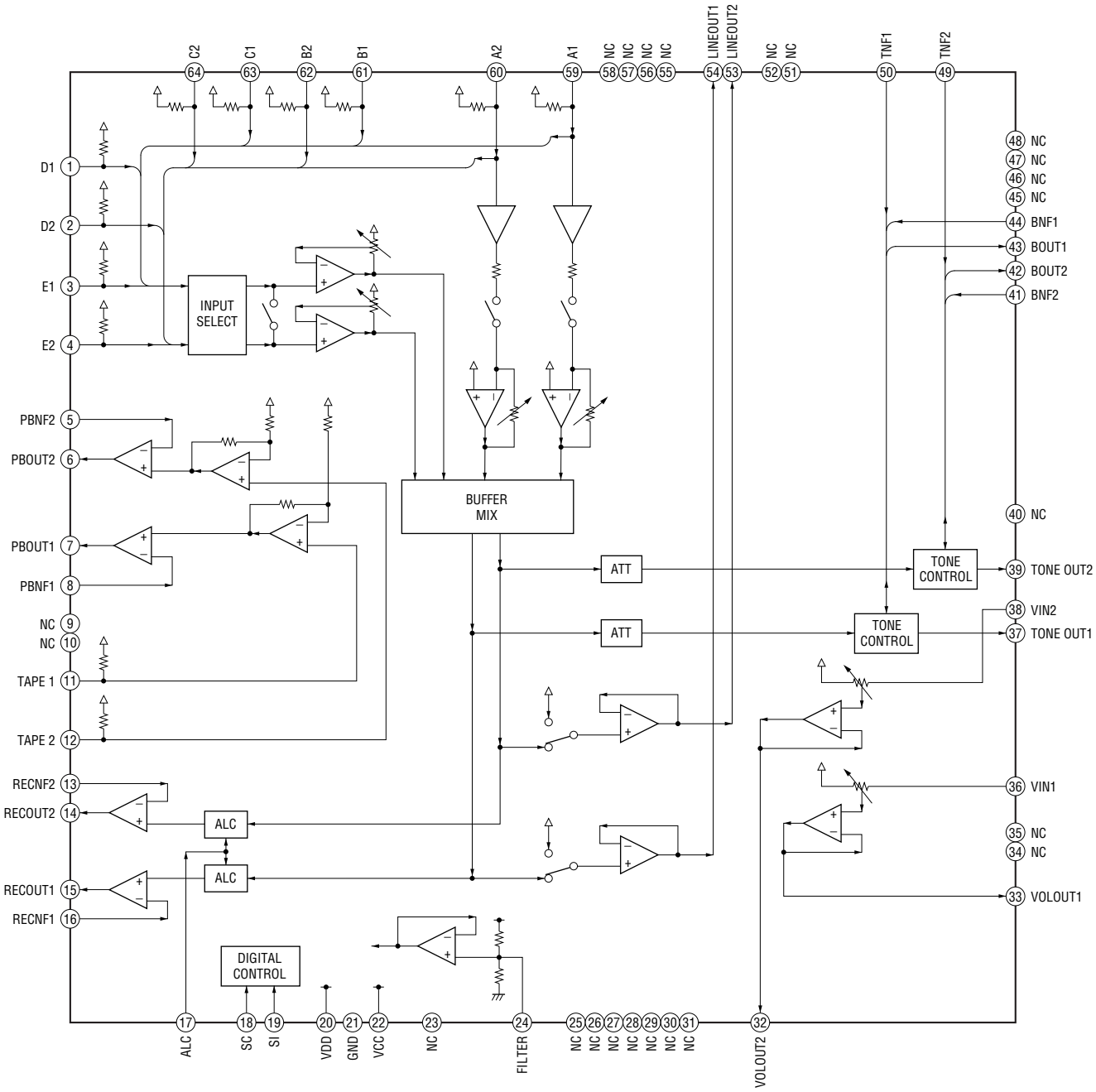


IC706 S-T111B15MC-OGATFG

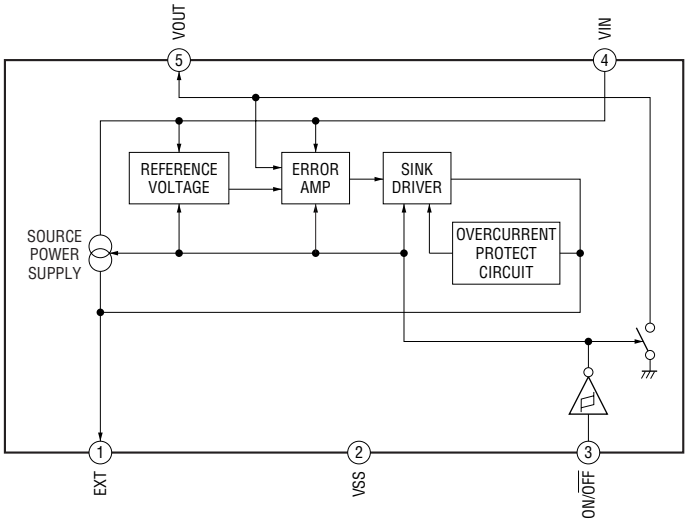


– MAIN Board –

IC301 BD3402KS2

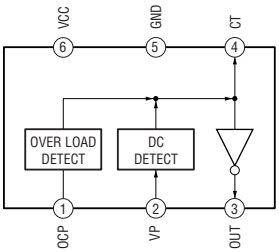


IC311 S-816A33AMC-BAI-T2-G



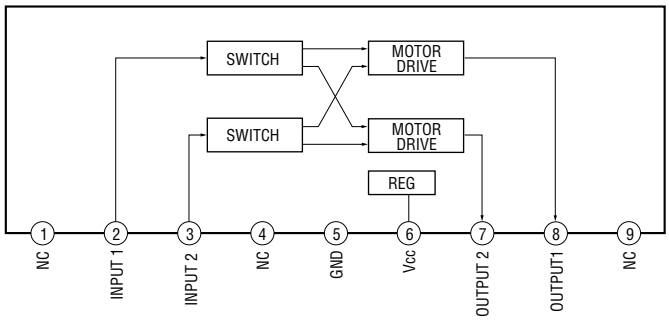
– AMP Board –

IC502 RT8H015C-T112-1



– LOADING Board –

IC651 BA6208



- **IC Pin Function Description**

CD BOARD IC702 CXD3029R (CD DSP)

Pin No.	Pin Name	I/O	Description
1	XRAS	O	Row address strobe signal output to the D-RAM
2	XWE	O	Data input enable signal output to the D-RAM
3 to 6	D1, D0, D3, D2	I/O	Two-way data bus with the D-RAM
7, 8	TEST1, TEST2	O	Not used
9	XCAS	O	Column address strobe signal output to the D-RAM
10	WFCK	O	Not used
11 to 13	A9 to A7	O	Address signal output to the D-RAM
14	DVSS	-	Ground terminal
15 to 17	A6 to A4	O	Address signal output to the D-RAM
18	XRDE	I	Read enable signal input from the MP3 decoder
19	VDD0	-	Power supply terminal (+3.3V)
20	CLOK	I	Serial data transfer clock signal input from the system controller
21	DATA	I	Serial data input from the system controller
22	SENS	O	SENS signal output to the system controller
23	XLAT	I	Serial data latch pulse signal input from the system controller
24	XSOE	I	Serial data output enable signal input from the system controller
25	SYSM	I	Analog muting on/off control signal input from the system controller "H": muting on fixed at "L" in this set
26	WDCK	O	Not used
27	SCOR	O	Subcode sync (S0+S1) detection signal output to the system controller
28	XRST	I	Reset signal input from the system controller "L": reset
29	PWMI	I	Not used
30	XQOK	I	Not used
31	XWRE	I	Not used
32	R8M	O	System clock output terminal Not used
33	VSS0	-	Ground terminal
34	SQCK	I	SQSO readout clock signal input terminal Not used
35	SCLK	I	SENS serial data read clock signal input terminal Not used
36	SQSO	O	Not used
37	XEMP	O	Not used
38	XWIH	O	Not used
39	SBSO	O	Not used
40	EXCK	O	SQSO readout clock signal output terminal Not used
41	XTSL	I	Input terminal for the system clock frequency setting fixed at "L" in this set
42	HVSS	-	Ground terminal
43	HPL	O	Not used
44	HPR	O	Not used
45	HPVDD	-	Power supply terminal (+3.3V)
46	XVDD	-	Power supply terminal (+3.3V)
47	XTAI	I	System clock input terminal (16.9344 MHz)
48	XTAO	O	System clock output terminal (16.9344 MHz)
49	XVSS	-	Ground terminal
50	AVDD1	-	Power supply terminal (+3.3V)
51	AOUT1	O	L-ch analog audio signal output terminal
52	VREFL	O	L-ch reference voltage output terminal

Pin No.	Pin Name	I/O	Description
53, 54	AVSS1, AVSS2	-	Ground terminal
55	VREFR	O	R-ch reference voltage output terminal
56	AOUT2	O	R-ch analog audio signal output terminal
57	AVDD2	-	Power supply terminal (+3.3V)
58	TES1	I	Input terminal for the test (fixed at "L")
59	TEST	I	Input terminal for the test (fixed at "L")
60	VSS1	-	Ground terminal
61	LRMU	O	Muting on/off control signal output terminal Not used
62	DOUT	O	Digital audio signal output terminal when playback mode Not used
63	ATSK	I/O	Not used
64	DFCT	I/O	Not used
65	FOK	O	Focus OK signal output to the system controller
66	MIRR	I/O	Not used
67	COUT	I/O	Not used
68	C2PO/MNT3/ GTOP	O	Not used
69	GFS/MNT2/ XROF	O	GFS signal output to the system controller
70	XUGF/MNT0/ RFCK	O	Not used
71	XPCK/MNT1/ XPCK	O	Not used
72	VDD1	-	Power supply terminal (+3.3V)
73	PCO	O	Charge pump output terminal for master PLL
74	FILI	I	Filter input terminal for master PLL
75	FILO	O	Filter output terminal for master PLL
76	CLTV	I	VCO1 control voltage input terminal for multiplier
77	VCTL	I	VCO2 control voltage input terminal for broad-band EFM PLL
78	VPCO	O	Charge pump output terminal for broad-band EFM PLL
79	AVSS3	-	Ground terminal
80	ASYO	O	EFM full-swing output terminal
81	ASYI	I	Asymmetry comparator voltage input terminal
82	BIAS	I	Asymmetry circuit constant current input terminal
83	AVDD3	-	Power supply terminal (+3.3V)
84	RFAC	I	EFM signal input from the RF amplifier
85	AVDD0	-	Power supply terminal (+3.3V)
86	IGEN	I	Stabilized current input terminal
87	AVSS0	-	Ground terminal
88	RFDC	I	RF signal input from the RF amplifier
89	CE	I	Chip enable signal input terminal Not used
90	TE	I	Tracking error signal input from the RF amplifier
91	SE	I	Sled error signal input from the RF amplifier
92	FE	I	Focus error signal input from the RF amplifier
93	VC	I	Middle point voltage input terminal
94	VSS2	-	Ground terminal
95	FRDR	O	Focus servo drive signal (-) output to the coil/motor drive
96	FFDR	O	Focus setvo drive signal (+) output to the coil/motor drive

Pin No.	Pin Name	I/O	Description
97	TRDR	O	Tracking servo drive signal (-) output to the coil/motor drive
98	TFDR	O	Tracking servo drive signal (+) output to the coil/motor drive
99	SRDR	O	Sled servo drive signal (-) output to the coil/motor drive
100	SFDR	O	Sled servo drive signal (+) output to the coil/motor drive
101	SSTP	I	Disc inner position detection signal input terminal
102	MDS	O	Spindle motor drive signal output terminal Not used
103	MDP	O	Spindle motor servo control signal output to the coil/motor drive
104	C176	O	176.4 kHz clock signal output terminal Not used
105	VDD2	-	Power supply terminal (+3.3V)
106	LRCK	O	L/R sampling clock signal output to the MP3 decoder
107	LRCKI	I	L/R sampling clock signal input from the MP3 decoder
108	PCMD	O	Serial data output to the MP3 decoder
109	PCMDi	I	Serial data input from the MP3 decoder
110	BCK	O	Bit clock signal output to the MP3 decoder
111	BCKI	I	Bit clock signal input from the MP3 decoder
112	DVDD	-	Power supply terminal (+3.3V)
113 to 117	A3 to A0, A10	O	Address signal output to the D-RAM
118	A11	O	Not used
119, 120	TEST3, TEST4	O	Not used

MAIN BOARD IC309 MB90474PF-G-202-BNDE1 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	CD_FOK	I	Focus OK signal input terminal
2	CD_GFS	I	GFS signal input terminal
3	CD_XRST	O	System reset signal output to the CD DSP
4	CD_RW/ROM	O	CD-RW/CD-ROM switching signal output terminal
5	CD_PWM RF	O	RF offset cancel PWM ouput terminal
6	CD_PWM TE	O	TE offset cancel PWM ouput terminal
7	CD_PWM FE	O	FE offset cancel PWM ouput terminal
8	CD_XSOE	O	Serial data output enable signal output to the CD DSP
9	CD_LDON	O	Laser diode on/off control signal output terminal
10	CD_SDXLAT	O	Chip select signal output to the MP3 decoder
11	VSS	-	Ground terminal
12	CD_NRST	O	System reset signal output to the MP3 decoder
13	CD_XWAKE	O	Wake up request signal output to the MP3 decoder
14	CD_CLOSEIN	I	Disc tray close detection switch input
15	CD_CLOSE	O	Loading motor control signal output terminal
16	CD_OPEN	O	Loading motor control signal output terminal
17	CD_OPENIN	I	Disc tray close detection switch input
18	CD_SENS	I	SENS sgnal input from the CD DSP
19	CD_DATA (O)	O	Serial data output to the CD DSP
20	CD_CLK (O)	O	Serial data transfer clock signal output to the CD DSP
21	CD_XLAT	O	Serial data latch pulse output to the CD DSP
22	CD_KSEL	I	DNK setting terminal fixed at "L" in this set
23	VCC	I	Power supply terminal (+3.3V)
24	CD-IMONITOR	I	Power supply for CD mechanism deck section check signal input terminal "L": OK
25	M_VOL-A	I	Jog dial pulse input from the rotary encoder
26	M_VOL-B	I	Jog dial pulse input from the rotary encoder
27	RDS-DATA (IN)	I	RDS serial data input from the tuner pack
28	R-DAT (I)	I	PLL serial data input from the tuner pack
29	RDS-INT (I)	I	RDS interrupt request signal input from the tuner pack
30	CD_ON	O	Power on/off control signal output for the CD mechanism deck section "H": power on
31	CD-MUTE	O	CD muting on/off control signal output terminal
32	A-MUTE	O	Audio muting on/off control signal output terminal
33	AU_A-SCL	O	Serial data transfer clock signal output to the input selector
34	AU_A-SDA	O	Serial data output to the input selector
35	AVCC	I	Power supply terminal (+3.3V)
36	AVRH	I	Reference voltage (+3.3V) input terminal
37	AVSS	I	Ground terminal
38 to 40	KEY-0 to KEY-2	I	Front panel key input terminal (A/D input)
41	SEL	I	Setting terminal for the destination
42	VSS	-	Ground terminal
43	JOG-A	I	Jog dial pulse input from the rotary encoder
44	JOG-B	I	Jog dial pulse input from the rotary encoder
45	P-CON	I	Serial data input terminal Not used
46	RELAY	O	Relay drive signal output for main power
47	CD_SCOR	I	Subcode sync (S0+S1) detection signal input from the CD DSP

Pin No.	Pin Name	I/O	Description
48	PSTBY	O	Standby on/off control signal output to the power amplifier
49 to 51	MD0 to MD2	I	Setting terminal for the CPU operational mode
52	CD_RDEN	I	Interrupt status input from the MP3 decoder
53	SHIFT CLOCK	O	Shift clock control signal output terminal "H": shift
54	AC-CHK	I	AC detection signal input terminal
55	R-DATA (O)	O	PLL serial data output to the tuner pack
56	RA-CE	O	PLL chip enable signal output to the tuner pack
57	RA-CLK	O	PLL serial data transfer clock signal output to the tuner pack
58	CD_SDIN	I	Serial data input from the MP3 decoder
59	CD_SDOUT	O	Serial data output to the MP3 decoder
60	CD_SDCK	O	Serial data transfer clock signal output to the MP3 decoder
61	RA-ST	I	FM stereo detection signal input from the tuner pack
62	R-SD (TUNED)	I	Tuning detection signal input from the tuner pack
63	RADIO	O	Power on/off control signal output terminal for the tuner pack
64	REMOCON-IN	I	Remote control signal input terminal
65	HP-SW	I	Headphone plug detection signal input terminal
66	HP-MUTE	O	Headphone muting on/off control signal output terminal
67	T-BIAS	O	REC bias on/off control signal output terminal
68	T-PR	O	REC/PB switching signal output terminal
69	T-PSW	I	Tape playback switch input terminal
70	T-A	I	Cassette tab for privent accidental recording detection input terminal (for side A)
71	T-B	I	Cassette tab for privent accidental recording detection input terminal (for side B)
72	T-CASS	I	Cassette tape detection switch input terminal
73	T-REEL	I	Cassette tape reel rotating detection input terminal
74	T-SOL	O	Trigger plunger drive signal output terminal
75	T-MOT	O	Power on/off control signal output for capstan/reel motor
76	ST-MUTE	O	Tuner muting on/off control signal output terminal
77	RESET	I	System reset signal input from the reset signal generator "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
78	INI	O	Destnation setting signal output terminal
79	X1A	I	System clock input terminal (32.768 kHz)
80	X0A	O	System clock output terminal (32.768 kHz)
81	VSS	-	Ground terminal
82	X0	O	System clock output terminal (4.19 MHz)
83	X1	I	System clock input terminal (4.19 MHz)
84	VCC	-	Power supply terminal (+3.3V)
85	CD_EEP CS	O	Chip select signal output terminal Not used
86	BLIT	O	LCD back light LED drive signal output terminal
87	PROTECT	I	Over load detection signal input terminal
88	LCD-CS	O	Chip select signal output to the LCD
89	LCD-RES	O	Reset signal output to the LCD
90	LCD-AO	O	LCD data/command switching signal output terminal
91	LCD-WR	O	Write strobe signal output to the LCD
92	ISS2	O	ISS 1/2 switching signal output terminal "L": ISS 1, "H": ISS 2
93 to 100	LCD_AD0 to LCD AD7	O	Data bus for LCD control

SECTION 7
EXPLODED VIEWS

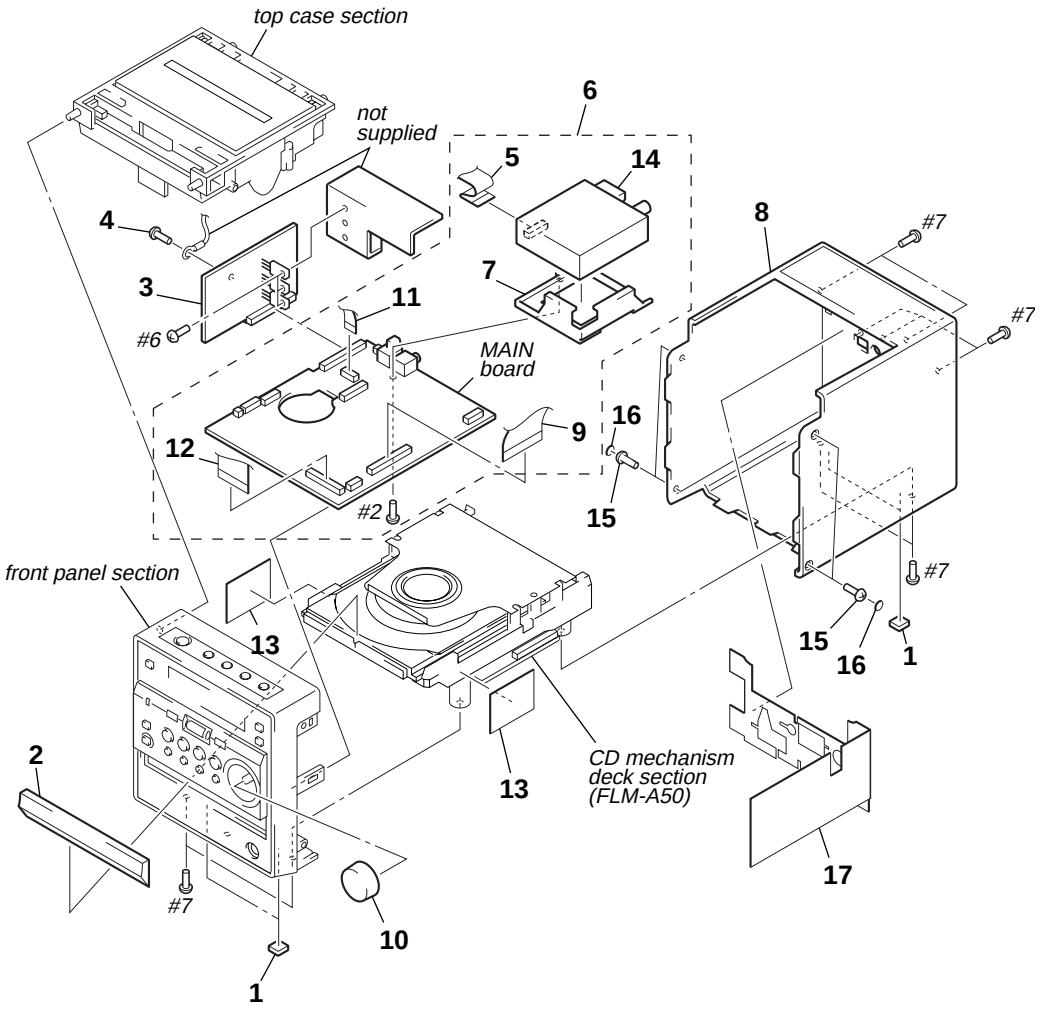
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  AUS : Australian model
  CND: Canadian model
  EE : East European model
  IT : Italian model
  KR : Korean model
  RU : Russian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

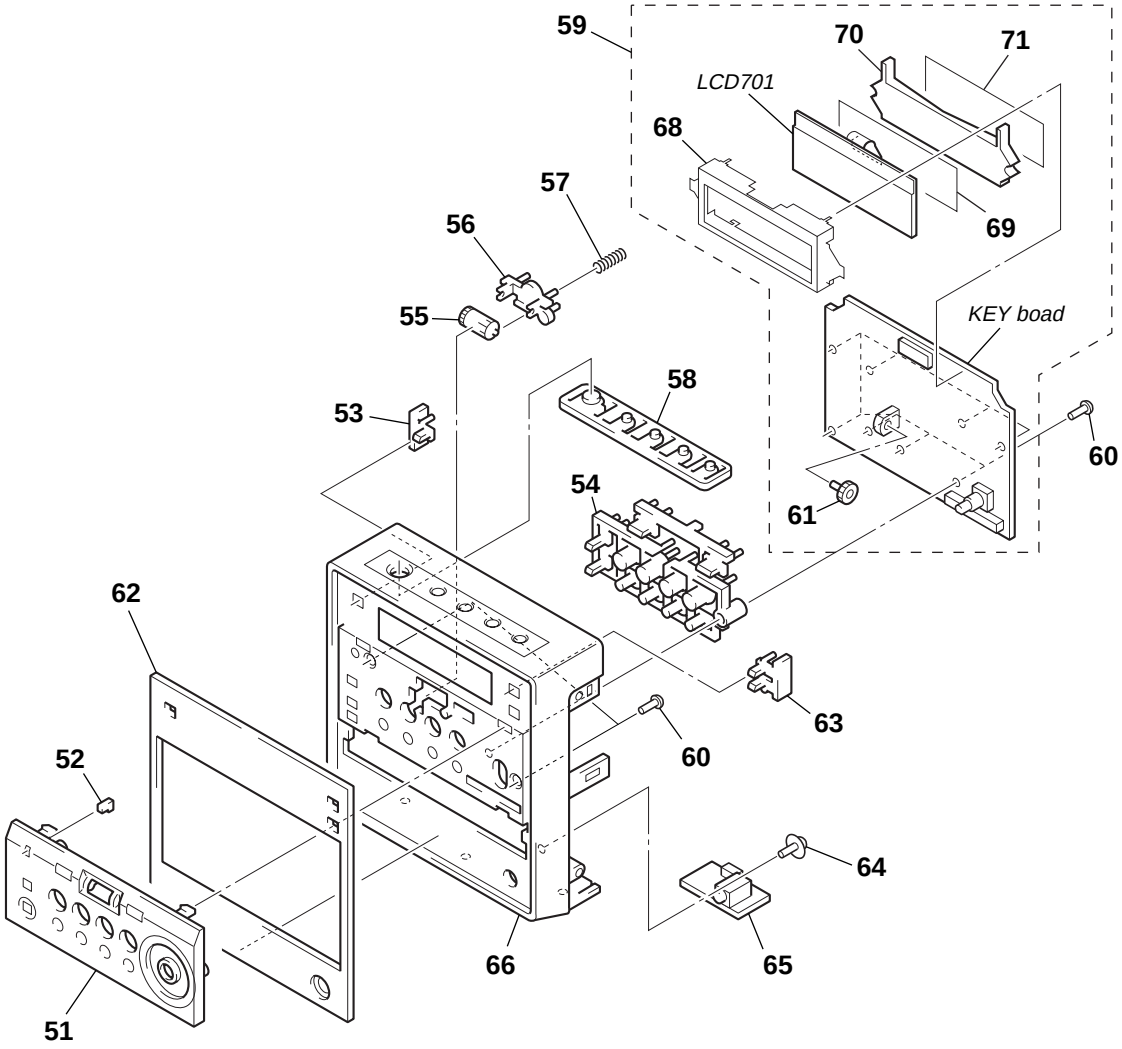
7-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	4-247-752-01	FOOT, RUBBER	
2	2-179-019-01	CD DOOR (A50)	
2	2-179-019-11	CD DOOR (A70)	
3	A-1077-604-A	SUB BOARD, COMPLETE	
4	3-254-151-01	SCREW (B2.6), (+) P TAPPING	
5	1-829-057-11	CABLE, FLEXIBLE FLAT (11 CORE) (US, CND, KR, AUS)	
5	1-829-945-11	CABLE, FLEXIBLE FLAT (15 CORE) (AEP, UK, IT, EE, RU)	
6	A-1077-601-A	MAIN BOARD, COMPLETE (AEP, UK, IT, EE, RU)	
6	A-1077-709-A	MAIN BOARD, COMPLETE (KR)	
6	A-1077-710-A	MAIN BOARD, COMPLETE (AUS)	
6	A-1077-711-A	MAIN BOARD, COMPLETE (US, CND)	
7	2-179-026-01	HOLDER TUNER	
8	2-179-017-01	CABINET REAR (A50)	
8	2-179-017-11	CABINET REAR (A70)	

Ref. No.	Part No.	Description	Remark
9	1-829-943-11	CABLE, FLEXIBLE FLAT (29 CORE)	
10	2-179-021-01	VOLUME KNOB	
11	1-829-946-11	CABLE, FLEXIBLE FLAT (8 CORE)	
12	1-829-944-11	CABLE, FLEXIBLE FLAT (25 CORE)	
13	2-188-059-01	WIRE PLATE	
14	1-693-625-11	TUNER (FM/AM) (US, CND)	
14	1-693-626-11	TUNER (FM/AM) (AEP, UK, IT, EE, RU)	
14	1-693-628-11	TUNER (FM/AM) (AUS)	
14	1-693-629-11	TUNER (FM/AM) (KR)	
15	3-254-081-01	SCREW	
16	2-546-332-01	STICKET	
17	2-515-644-01	BACK SHIELD	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#6	7-685-645-14	SCREW +BVTP 3X6 TYPE2 N-S	
#7	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S	

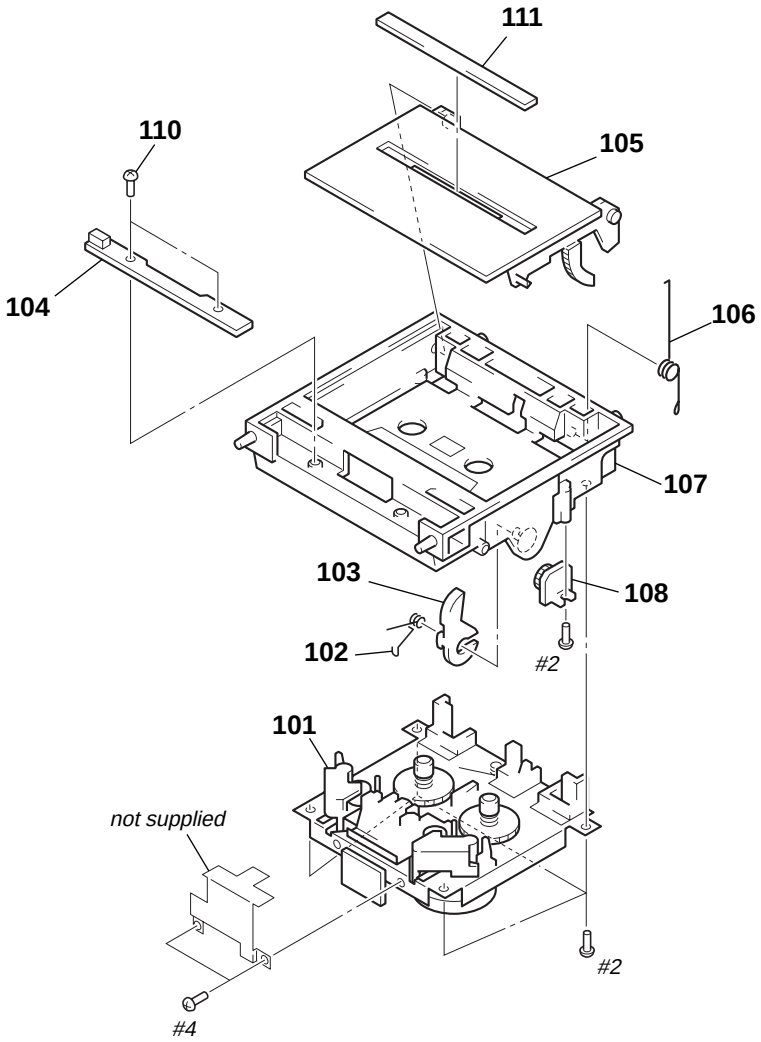
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	2-186-716-01	MAIN COVER (A50)	
51	2-186-716-11	MAIN COVER (A70)	
52	2-186-717-01	EYE LED	
53	2-179-037-01	FUNCTION BUTTON	
54	2-179-022-01	MAIN BUTTON	
55	2-179-023-01	JOG KNOB	
56	2-179-028-01	JOG HOLDER	
57	2-188-049-01	JOG SPRING	
58	2-179-024-01	TOP BUTTON	
59	A-1077-596-A	KEY BOARD, COMPLETE	
60	4-951-620-01	SCREW (2.6X8), +BVTP	
61	2-179-027-01	JOG GEAR	
62	2-179-020-01	LCD WINDOW (EXCEPT US, CND, AUS)	

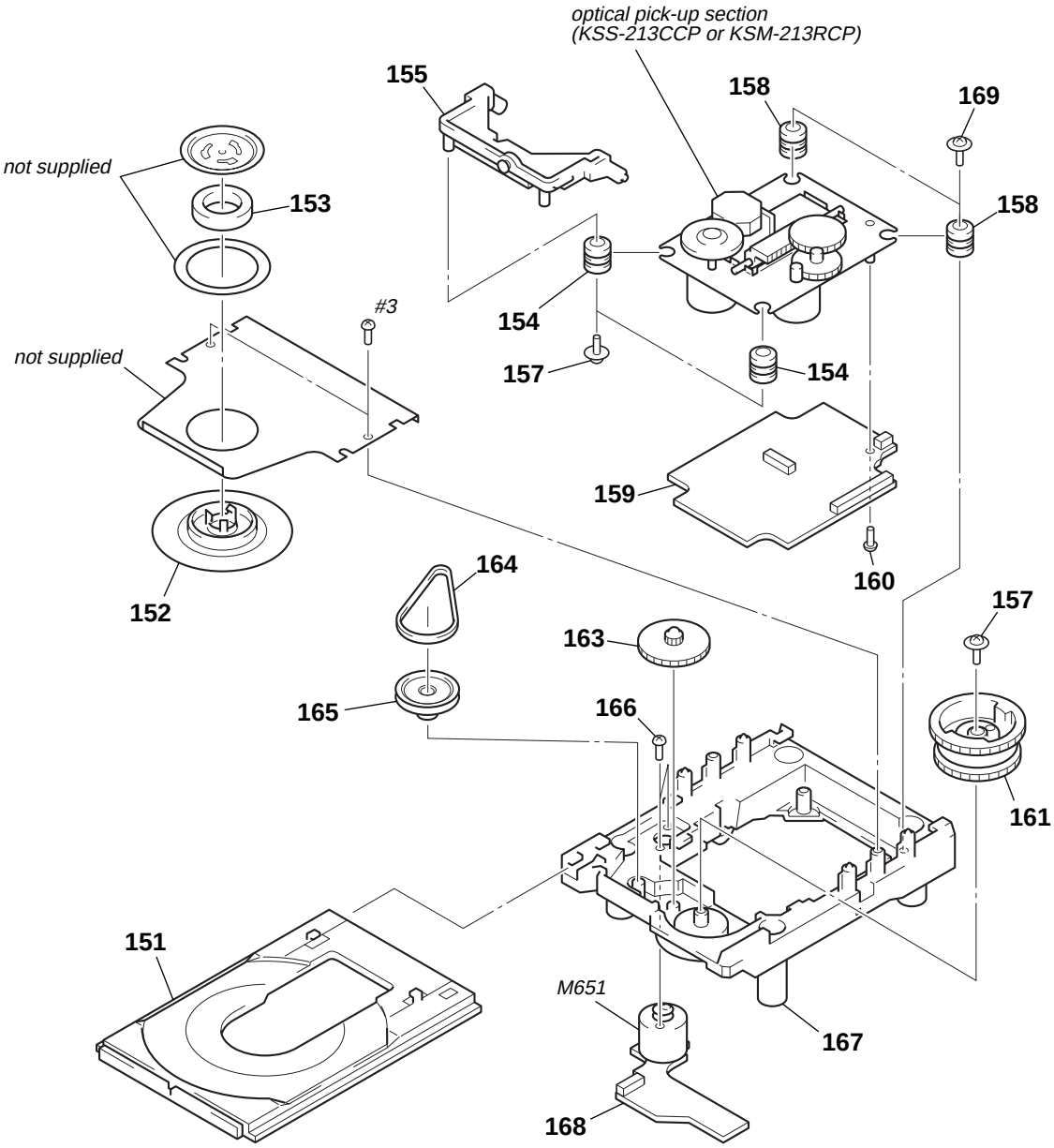
Ref. No.	Part No.	Description	Remark
62	2-179-020-11	LCD WINDOW (US, CND, AUS)	
63	2-186-718-01	SOUND BUTTON	
64	3-921-725-01	SCREW (2.6X10), +PWH	
65	A-1077-598-A	JACK BOARD, COMPLETE	
66	2-179-015-01	FRONT PANEL (A50: AEP, UK, IT, EE, RU)	
66	2-179-015-11	FRONT PANEL (A50: KR)	
66	2-179-015-21	FRONT PANEL (A70: AEP, UK, IT, EE, RU)	
66	2-179-015-31	FRONT PANEL (A70: US, CND, AUS)	
68	2-179-030-01	LCD CAN	
69	2-179-035-01	LCD PAPER	
70	2-179-036-01	LCD HOLDER	
71	2-515-645-01	LCD REFLECTOR	
LCD701	1-479-082-11	INDICATOR UNIT, LIQUID CRYSTAL	

7-3. TOP CASE SECTION



Ref. No.	Part No.	Description	Remark
101	1-796-351-81	MECHANISM, SIGNAL CASSETTE (CMAL1Z252A)	
102	4-231-836-01	SPRING (HEART CAM-A)	
103	4-231-824-01	CAM (A), HEART	
104	A-1077-600-A	TOP KEY BOARD, COMPLETE	
105	2-179-018-01	TOP CASE (A50)	
105	2-179-018-11	TOP CASE (A70)	
106	2-179-034-01	DOOR SPRING	
107	2-179-025-01	CASSETT HOLDER (A50)	
107	2-179-025-11	CASSETT HOLDER (A70)	
108	3-047-468-01	DAMPER	
110	4-951-620-01	SCREW (2.6X8), +BVTP	
111	2-179-029-01	CASSETTE WINDOW	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-685-792-09	SCREW +PTT 2.6X6 (S)	

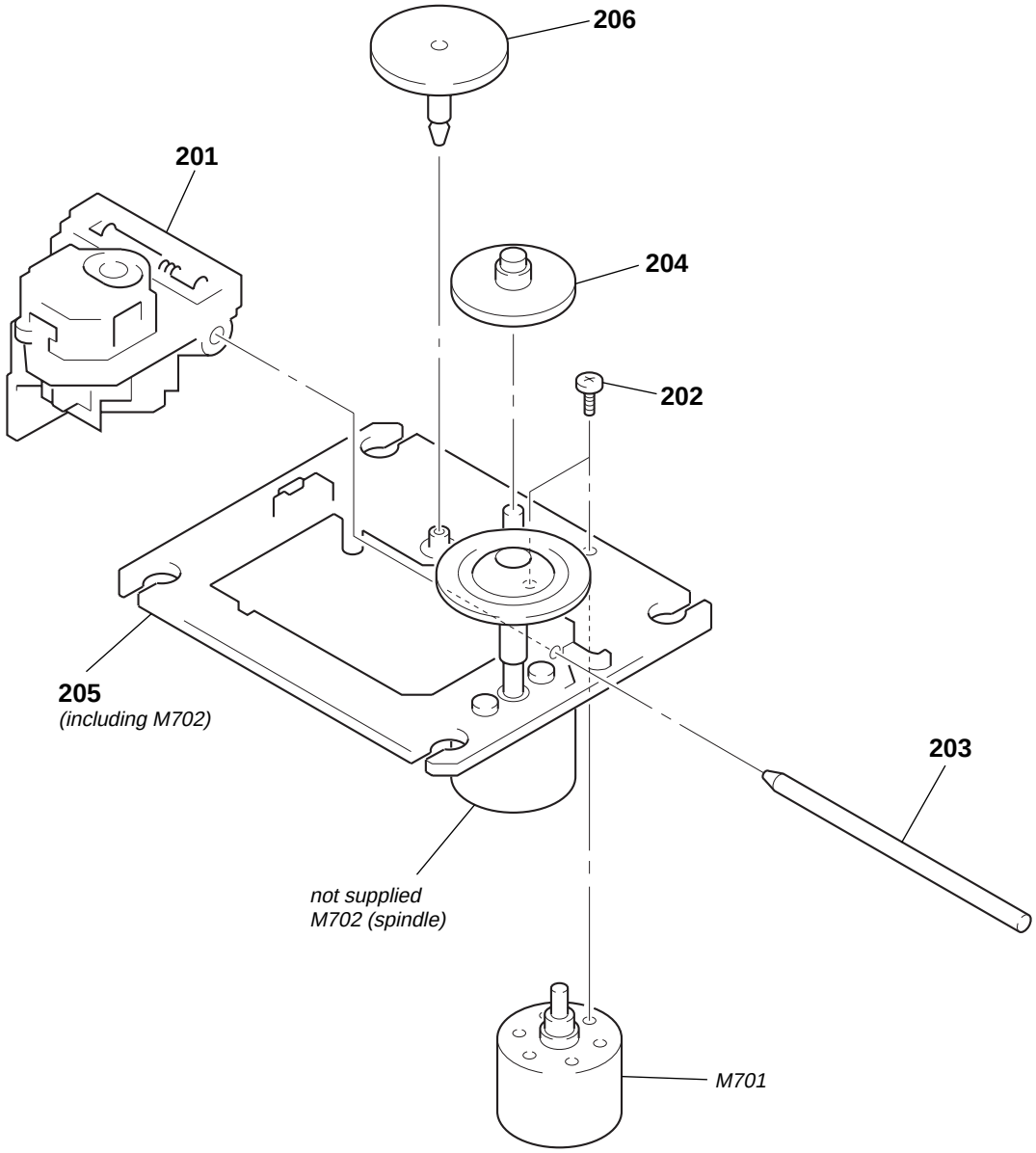
7-4. CD MECHANISM DECK SECTION (FLM-A50)



Ref. No.	Part No.	Description	Remark
151	3-028-010-02	TRAY	
152	3-028-019-11	PLATE, CHUCK	
153	1-452-899-21	MAGNET	
154	3-931-379-31	RUBBER, VIBRATION PROOF (GREEN)	
155	3-028-011-01	ARM	
157	3-921-725-11	SCREW (2.6X10), +PWH	
158	3-931-379-21	RUBBER, VIBRATION PROOF (RED)	
159	A-4547-683-A	CD BOARD, COMPLETE	
160	3-245-709-51	SCREW	
161	3-028-013-01	GEAR, DRIVE	

Ref. No.	Part No.	Description	Remark
163	3-028-014-01	GEAR	
164	3-933-020-01	BELT	
165	3-028-015-01	PULLEY	
166	3-713-786-51	SCREW +P 2X3	
167	3-028-009-12	CHASSIS	
* 168	1-671-072-11	LOADING BOARD	
169	3-921-725-01	SCREW (2.6X10), +PWH	
M651	A-3320-538-A	MOTOR ASSY, LOADING	
#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

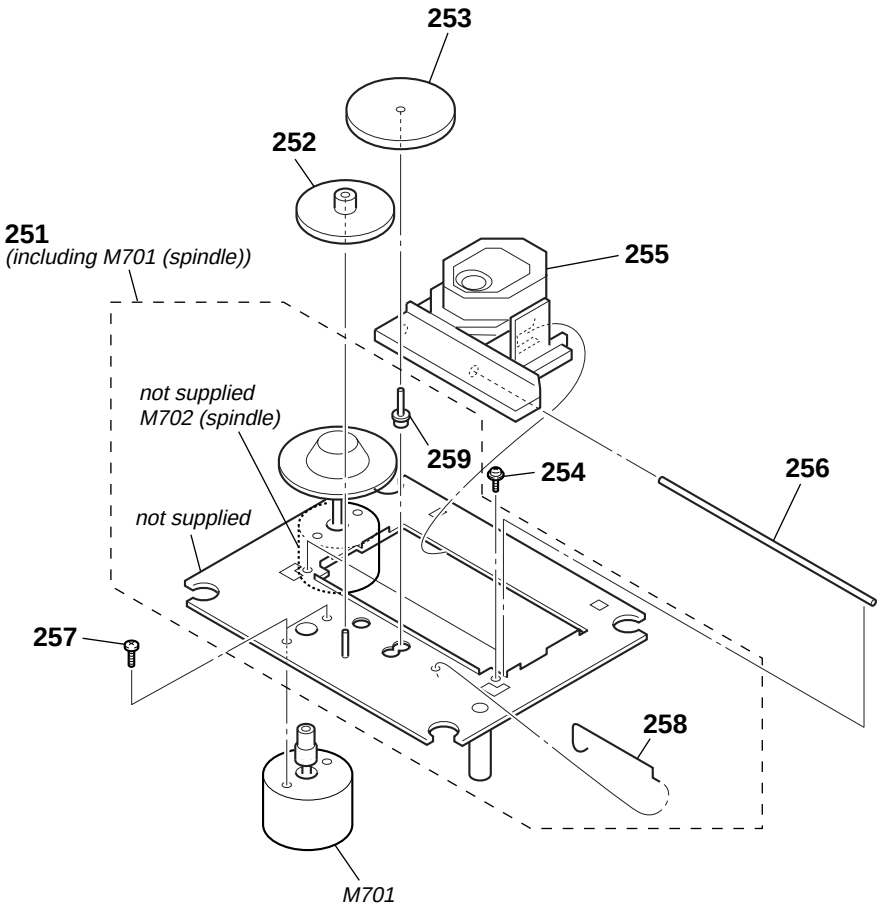
7-5. OPTICAL PICK-UP SECTION (KSM-213CCP)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
⚠201	8-848-483-12	OPTICAL PICK-UP (KSS-213C/C2RP1)	
202	2-174-500-01	SCREW (2X3)	
203	2-626-908-01	SHAFT, SLED	
204	2-627-003-01	GEAR (B) (RP)	
205	X-2162-709-2	CHASSIS ASSY (CDP), MOTOR (including M702 (SPINDLE))	
206	2-626-907-11	GEAR (A)	
M701	X-2625-769-1	GEAR ASSY (MB) (RP), MOTOR (SLED)	

7-6. OPTICAL PICK-UP SECTION (KSM-213RCP)



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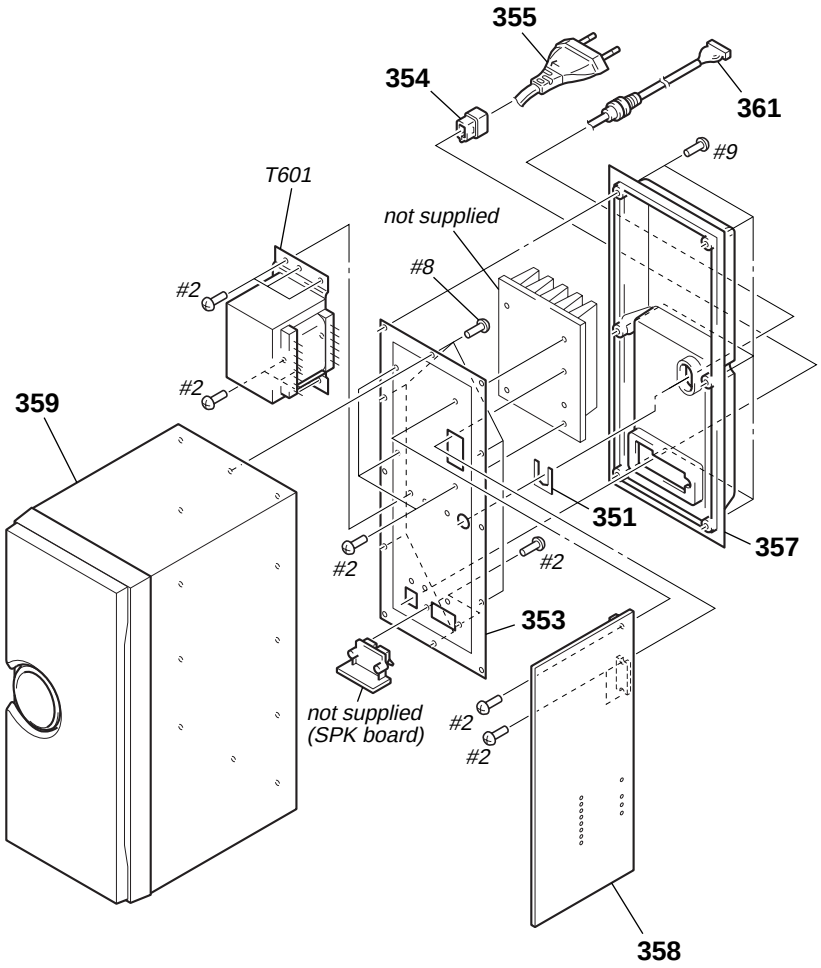
Ref. No.	Part No.	Description	Remark
251	X-2162-707-2	CHASSIS ASSY (RDP) (RP), MOTOR (including M702 (SPINDLE))	
* 252	2-647-408-02	GEAR (B)	
* 253	2-169-065-01	GEAR (A)	
254	2-169-388-11	TAPPING (M2), +PWB	
⚠255	8-820-161-02	OPTICAL PICK-UP (KSS-213R/C2RP)	
256	2-626-908-01	SHAFT, SLED	
257	2-174-500-01	SCREW (2X3)	
* 258	2-169-385-01	SPRING, SLED	
* 259	2-169-384-01	SHAFT (S), GEAR	
M701	X-2162-712-2	GEAR ASSY (R) (RP), MOTOR (SLED)	

7-7. SPEAKER (LEFT) SECTION (A50)



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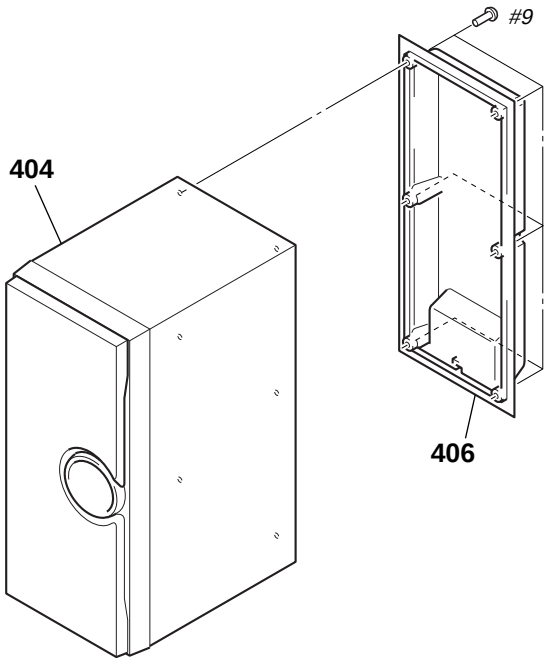
Ref. No.	Part No.	Description	Remark
351	2-179-032-01	OUTJACK BRACKET	
353	2-188-056-01	SPEAKER PLATE	
354	3-703-244-00	BUSHING (2104), CORD	
⚠355	1-769-079-41	CORD, POWER (KR)	
⚠355	1-769-744-52	CORD, POWER (AEP, UK, IT, EE, RU)	
357	2-188-053-01	SPEAKER REAR LEFT A	
358	A-1077-610-A	AMP BOARD, COMPLETE (AEP, UK, IT, EE, RU)	

Ref. No.	Part No.	Description	Remark
358	A-1077-747-A	AMP BOARD, COMPLETE (KR)	
359	X-2023-712-1	BOX (L) ASSY, SPEAKER	
361	1-830-212-12	LEAD (WITH CONNECTOR)	
⚠T601	1-443-512-11	TRANSFORMER, POWER	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#8	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#9	7-621-849-20	SCREW, WOOD +R3.1X16	

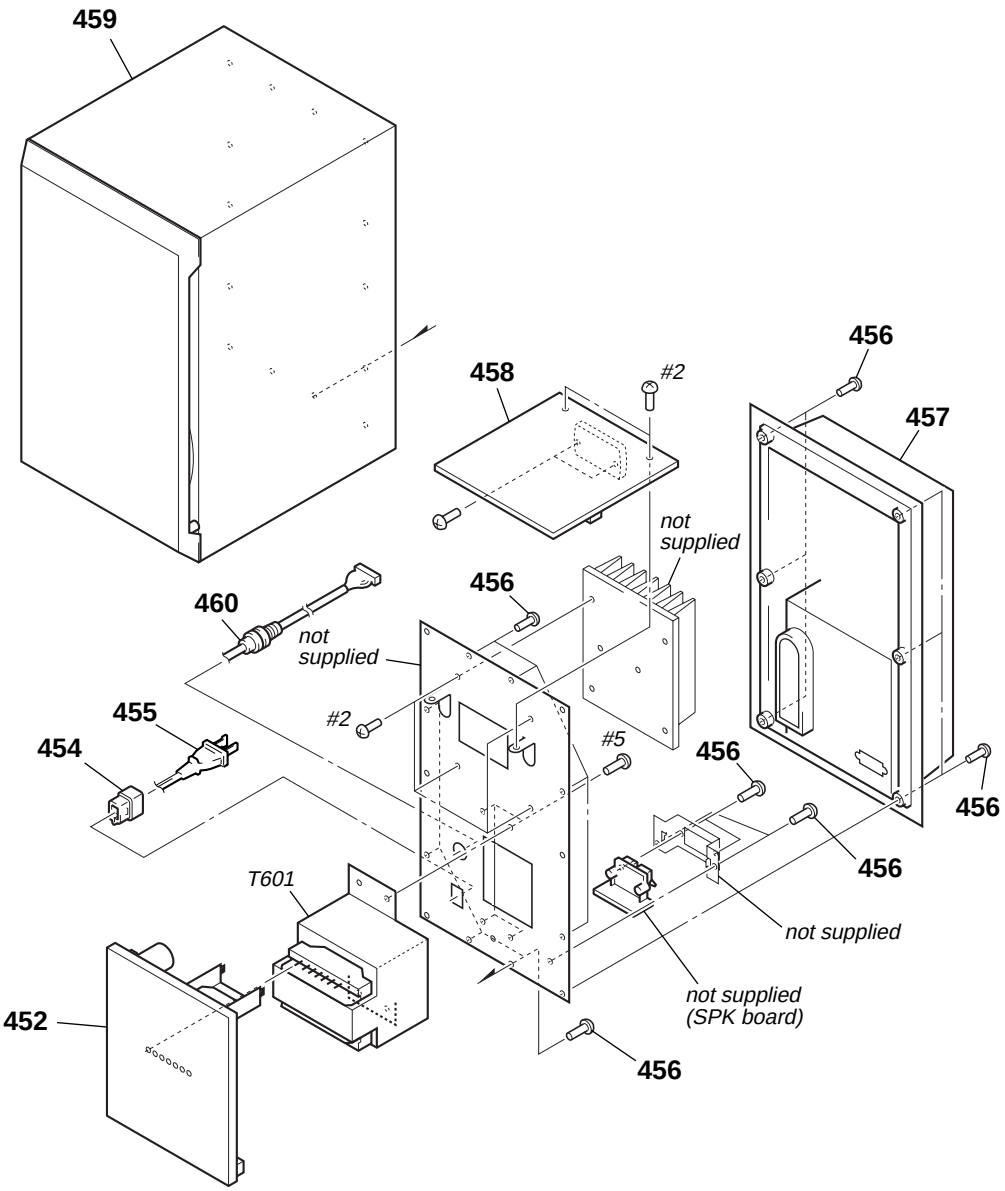
7-8. SPEAKER (RIGHT) SECTION (A50)



Ref. No.	Part No.	Description	Remark
404	X-2023-713-1	BOX (R) ASSY, SPEAKER	
406	2-188-054-01	SPEAKER REAR RIGHT A	

Ref. No.	Part No.	Description	Remark
#9	7-621-849-20	SCREW, WOOD + R 3.1X16	

7-9. SPEAKER (LEFT) SECTION (A70)



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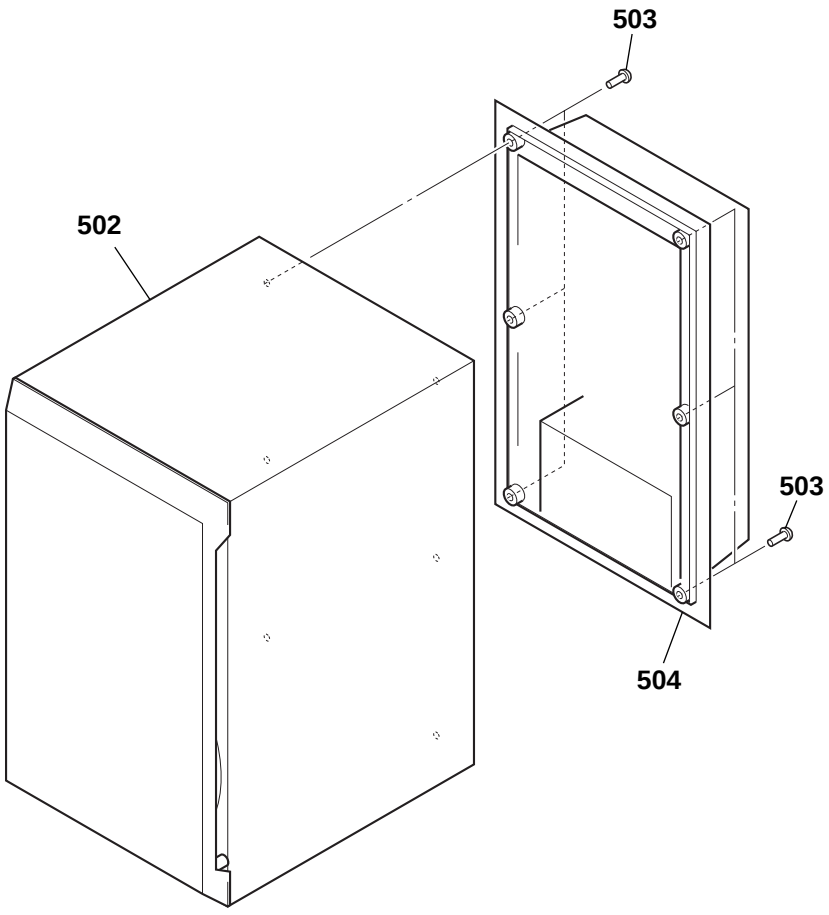
Ref. No.	Part No.	Description	Remark
452	A-1077-663-A	POWER BOARD, COMPLETE (AEP, UK, IT, EE, RU, AUS)	
452	A-1077-762-A	POWER BOARD, COMPLETE (US, CND)	
454	3-703-244-00	BUSHING (2104), CORD	
⚠455	1-769-744-52	CORD, POWER (AEP, UK, IT, EE, RU)	
⚠455	1-775-790-12	CORD, POWER (AUS)	
⚠455	1-783-531-22	CORD, POWER (US, CND)	
456	3-252-829-01	SCREW (B3), (+) BV TAPPING	
457	2-188-060-01	SPEAKER REAR LEFT B	
458	A-1077-662-A	AMP BOARD, COMPLETE	
459	X-2023-725-1	BOX (L) ASSY, SPEAKER	
460	1-830-212-11	LEAD (WITH CONNECTOR)	
⚠T601	1-443-513-11	TRANSFORMER, POWER (AEP, UK, IT, EE, AUS)	
⚠T601	1-443-514-11	TRANSFORMER, POWER (US, CND)	
#2	7-685-647-79	SCREW +BVTP 3X10	
#5	7-685-880-09	SCREW +BVTT 4X6 (S)	

7-10. SPEAKER (RIGHT) SECTION (A70)



Ref. No.	Part No.	Description	Remark
502	X-2023-726-1	BOX (R) ASSY, SPEAKER	
503	3-252-829-01	SCREW (B3), (+) BV TAPPING	
504	2-188-061-01	SPEAKER REAR RIGHT B	

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  EE : East European model
  IT : Italian model
  KR : Korean model
  RU : Russian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1077-610-A	AMP BOARD, COMPLETE (A50: AEP, UK, IT, EE, RU)			
	A-1077-662-A	AMP BOARD, COMPLETE (A70)			
	A-1077-747-A	AMP BOARD, COMPLETE (KR)			
		**********			
	1-533-233-31	FUSE HOLDER (A50)			
		< CAPACITOR >			
C501	1-126-964-11	ELECT	10uF	20%	50V
C502	1-126-964-11	ELECT	10uF	20%	50V
C503	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C505	1-126-964-11	ELECT	10uF	20%	50V
C506	1-126-964-11	ELECT	10uF	20%	50V
C507	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C508	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C509	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C510	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C511	1-126-957-11	ELECT	0.22uF	20%	50V
C512	1-126-957-11	ELECT	0.22uF	20%	50V
C513	1-136-497-81	FILM	0.1uF	5%	50V
C514	1-136-497-81	FILM	0.1uF	5%	50V
C517	1-136-497-81	FILM	0.1uF	5%	50V
C518	1-136-497-81	FILM	0.1uF	5%	50V
C519	1-136-497-81	FILM	0.1uF	5%	50V
C520	1-136-497-81	FILM	0.1uF	5%	50V
C521	1-126-965-11	ELECT	22uF	20%	50V
C522	1-126-965-11	ELECT	22uF	20%	50V
C523	1-126-964-11	ELECT	10uF	20%	50V (A50)
C524	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C525	1-126-960-11	ELECT	1uF	20%	50V (A70)
C525	1-126-961-11	ELECT	2.2uF	20%	50V (A50)
C526	1-104-665-11	ELECT	100uF	20%	25V
C527	1-162-294-31	CERAMIC	0.001uF	10%	50V
C528	1-126-964-11	ELECT	10uF	20%	50V
C529	1-126-960-11	ELECT	1uF	20%	50V (A50)
C531	1-126-967-11	ELECT	47uF	20%	50V
C533	1-136-153-00	FILM	0.01uF	5%	50V
C534	1-136-153-00	FILM	0.01uF	5%	50V
C601	1-128-550-11	ELECT	2200uF	20%	50V
C602	1-128-550-11	ELECT	2200uF	20%	50V
C603	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C604	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C605	1-128-548-11	ELECT	4700uF	20%	25V (A50)
C606	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C607	1-126-972-11	ELECT	1000uF	20%	50V (A70)
C608	1-126-972-11	ELECT	1000uF	20%	50V (A70)
⚠C609	1-113-925-11	CERAMIC	0.01uF	20%	250V (A50)
C610	1-126-943-11	ELECT	2200uF	20%	25V (A50)
C611	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C612	1-101-005-00	CERAMIC	0.022uF		50V (A50)
C613	1-101-005-00	CERAMIC	0.022uF		50V (A50)
C614	1-101-005-00	CERAMIC	0.022uF		50V (A50)
C615	1-101-005-00	CERAMIC	0.022uF		50V (A50)
C617	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C618	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C619	1-136-497-81	FILM	0.1uF	5%	50V (A50)
C620	1-136-497-81	FILM	0.1uF	5%	50V (A50)
		< CONNECTOR >			
* CN501	1-564-510-11	PLUG, CONNECTOR 7P (POWER OUT TO MAIN UNIT)			
* CN502	1-564-512-11	PLUG, CONNECTOR 9P (POWER OUT TO MAIN UNIT)			
CN503	1-564-506-11	PLUG, CONNECTOR 3P			
CN504	1-564-505-11	PLUG, CONNECTOR 2P			
* CN505	1-564-596-11	PLUG, CONNECTOR 15P (A70)			
CN602	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P (A50)			

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D501	8-719-991-33	DIODE 1SS133T-77	
D502	8-719-991-33	DIODE 1SS133T-77	
D503	8-719-991-33	DIODE 1SS133T-77	
D504	8-719-991-33	DIODE 1SS133T-77	
D505	8-719-109-72	DIODE RD3.9ESB2 (A50)	
D506	8-719-991-33	DIODE 1SS133T-77 (A50)	
D507	8-719-991-33	DIODE 1SS133T-77 (A50)	
D508	8-719-991-33	DIODE 1SS133T-77 (A50)	
D509	8-719-991-33	DIODE 1SS133T-77	
D513	8-719-991-33	DIODE 1SS133T-77 (A50)	
D514	8-719-991-33	DIODE 1SS133T-77 (A50)	
D515	8-719-991-33	DIODE 1SS133T-77	
D601	8-719-500-56	DIODE D3SBA20 (A50)	
D602	8-719-046-07	DIODE 2A02M (A50)	
D603	8-719-046-07	DIODE 2A02M (A50)	
D604	8-719-046-07	DIODE 2A02M (A50)	
D605	8-719-046-07	DIODE 2A02M (A50)	
D610	8-719-991-33	DIODE 1SS133T-77 (A50)	
D611	8-719-991-33	DIODE 1SS133T-77 (A50)	
D612	8-719-991-33	DIODE 1SS133T-77 (A50)	
D613	8-719-991-33	DIODE 1SS133T-77 (A50)	
D614	8-719-991-33	DIODE 1SS133T-77 (A50)	
		< FUSE >	
⚠F601	1-533-470-12	FUSE (T3.15AL/250V) (A50)	
⚠F602	1-533-470-12	FUSE (T3.15AL/250V) (A50)	
⚠F603	1-533-464-12	FUSE, GLASS TUBE (DIA. 5) (T0.8AL/250V)	(A50)
		< IC >	
IC501	6-600-345-01	IC STK453-030S (A50)	
IC501	6-705-621-01	IC STK433-070 (A70)	
IC502	6-703-610-01	IC RT8H015C-T112-1	
		< COIL >	
L501	1-422-009-13	COIL, AIR-CORE	
L502	1-422-009-13	COIL, AIR-CORE	
		< LINE FILTER >	
⚠LF601	1-402-663-11	TRANSFORMER, LINE FILTER (LFT) (A50)	
		< TRANSISTOR >	
Q501	8-729-905-50	TRANSISTOR DTC343TS	
Q502	8-729-905-50	TRANSISTOR DTC343TS	
Q503	8-729-038-67	TRANSISTOR KRC102S	
Q504	8-729-038-54	TRANSISTOR KRA102S	
Q505	8-729-038-54	TRANSISTOR KRA102S	
Q506	8-729-016-42	TRANSISTOR KTC3199GR-TP	
Q507	8-729-037-03	TRANSISTOR KTA1266GR-AT	
Q508	8-729-037-03	TRANSISTOR KTA1266GR-AT	
Q509	8-729-016-42	TRANSISTOR KTC3199GR-TP	
Q510	8-729-905-50	TRANSISTOR DTC343TS	
Q511	8-729-905-50	TRANSISTOR DTC343TS	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R501	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (A50)
R501	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (A70)
R502	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (A50)
R502	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (A70)
R503	1-216-845-11	METAL CHIP	100K	5%	1/10W
R504	1-216-845-11	METAL CHIP	100K	5%	1/10W
R505	1-216-809-11	METAL CHIP	100	5%	1/10W (A50)
R505	1-216-864-11	SHORT CHIP	0 (A70)		
R506	1-216-809-11	METAL CHIP	100	5%	1/10W (A50)
R506	1-216-864-11	SHORT CHIP	0 (A70)		
R507	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R508	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R509	1-216-841-11	METAL CHIP	47K	5%	1/10W
R510	1-216-841-11	METAL CHIP	47K	5%	1/10W
R511	1-216-841-11	METAL CHIP	47K	5%	1/10W
R512	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R513	1-220-755-11	METAL	0.22	10%	2W F
⚠R514	1-220-755-11	METAL	0.22	10%	2W F
R515	1-216-821-11	METAL CHIP	1K	5%	1/10W
R516	1-216-821-11	METAL CHIP	1K	5%	1/10W
R517	1-216-833-11	METAL CHIP	10K	5%	1/10W
R518	1-216-833-11	METAL CHIP	10K	5%	1/10W
R519	1-260-076-11	CARBON	10	5%	1/2W
R520	1-260-076-11	CARBON	10	5%	1/2W
R523	1-216-841-11	METAL CHIP	47K	5%	1/10W
R524	1-216-841-11	METAL CHIP	47K	5%	1/10W
R527	1-260-076-11	CARBON	10	5%	1/2W
R528	1-260-076-11	CARBON	10	5%	1/2W
R529	1-216-821-11	METAL CHIP	1K	5%	1/10W
R530	1-216-821-11	METAL CHIP	1K	5%	1/10W
R531	1-216-833-11	METAL CHIP	10K	5%	1/10W
R532	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R534	1-216-849-11	METAL CHIP	220K	5%	1/10W
R535	1-216-833-11	METAL CHIP	10K	5%	1/10W
R536	1-249-421-11	CARBON	2.2K	5%	1/4W (A50)
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W
R539	1-216-853-11	METAL CHIP	470K	5%	1/10W
R540	1-216-821-11	METAL CHIP	1K	5%	1/10W
R541	1-216-809-11	METAL CHIP	100	5%	1/10W
R543	1-249-433-11	CARBON	22K	5%	1/4W (A50)
R544	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (A70)
R544	1-216-833-11	METAL CHIP	10K	5%	1/10W (A50)
R545	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (A70)
R545	1-216-833-11	METAL CHIP	10K	5%	1/10W (A50)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
R546	1-216-821-11	METAL CHIP	1K	5%	1/10W
R547	1-216-809-11	METAL CHIP	100	5%	1/10W
R548	1-216-837-11	METAL CHIP	22K	5%	1/10W
R549	1-216-833-11	METAL CHIP	10K	5%	1/10W
R550	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R551	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R552	1-202-972-61	FUSIBLE	1	5%	1/4W F
⚠R553	1-202-972-61	FUSIBLE	1	5%	1/4W F
R554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R555	1-216-841-11	METAL CHIP	47K	5%	1/10W (A50)
R555	1-216-833-11	METAL CHIP	10K	5%	1/10W (A70)
R556	1-216-841-11	METAL CHIP	47K	5%	1/10W (A50)
R556	1-216-833-11	METAL CHIP	10K	5%	1/10W (A70)
R557	1-216-833-11	METAL CHIP	10K	5%	1/10W
R558	1-216-833-11	METAL CHIP	10K	5%	1/10W
R559	1-216-833-11	METAL CHIP	10K	5%	1/10W
R560	1-216-833-11	METAL CHIP	10K	5%	1/10W
R561	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R562	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R563	1-216-821-11	METAL CHIP	1K	5%	1/10W
R564	1-216-833-11	METAL CHIP	10K	5%	1/10W
R565	1-216-833-11	METAL CHIP	10K	5%	1/10W
R566	1-216-821-11	METAL CHIP	1K	5%	1/10W
⚠R601	1-219-121-11	FUSIBLE	0.22	5%	1/4W F (A50)
⚠R602	1-219-121-11	FUSIBLE	0.22	5%	1/4W F (A50)
R604	1-249-417-11	CARBON	1K	5%	1/4W (A50)
R605	1-249-417-11	CARBON	1K	5%	1/4W (A50)
R606	1-249-425-11	CARBON	4.7K	5%	1/4W (A50)
R607	1-249-425-11	CARBON	4.7K	5%	1/4W (A50)
R608	1-249-437-11	CARBON	47K	5%	1/4W
		< RELAY >			
⚠RY601	1-755-276-11	RELAY, POWER (A50)			
		< TRANSFORMER >			
⚠T602	1-439-779-11	TRANSFORMER, POWER (A50: AEP, UK, IT, EE, RU)			
⚠T602	1-443-041-11	TRANSFORMER, POWER (KR)			
**********					
	A-4547-683-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C702	1-104-665-11	ELECT	100uF	20%	25V
C703	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C704	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C705	1-104-665-11	ELECT	100uF	20%	25V

Ref. No.	Part No.	Description			Remark
C707	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C708	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C709	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C710	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C711	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C712	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C713	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C714	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C715	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C716	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C717	1-104-665-11	ELECT	100uF	20%	25V
C718	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C719	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C720	1-104-665-11	ELECT	100uF	20%	25V
C721	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C722	1-104-665-11	ELECT	100uF	20%	25V
C723	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C724	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C725	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C726	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C727	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C728	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C729	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C730	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C731	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C732	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C733	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C734	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C735	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C736	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C737	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C738	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C739	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C740	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C741	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C742	1-104-662-91	ELECT	22uF	20%	25V
C743	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C744	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C745	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C746	1-104-665-11	ELECT	100uF	20%	25V
C747	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C748	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C749	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C750	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C751	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C752	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C753	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C754	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C755	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C756	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C757	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C758	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C759	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C761	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C762	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C763	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C766	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C767	1-162-974-11	CERAMIC CHIP	0.01uF		50V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
C768	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C769	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C770	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C771	1-126-934-11	ELECT	220uF	20%	16V
C772	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C773	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C774	1-104-665-11	ELECT	100uF	20%	25V
C775	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C779	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C780	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C781	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C782	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C783	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C784	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C785	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C786	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C787	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C788	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C789	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C790	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C791	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C792	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C794	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C797	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C798	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C799	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C1001	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C1002	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C1003	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C1005	1-104-662-91	ELECT	22uF	20%	25V
C1008	1-162-974-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN701	1-770-168-11	CONNECTOR, FFC/FPC 16P			
CN702	1-784-751-11	CONNECTOR, FFC 29P			
CN703	1-815-551-11	PIN, CONNECTOR (PWB) 3P			
		< SHORT CHIP >			
FB701	1-216-864-11	SHORT CHIP	0		
FB702	1-216-864-11	SHORT CHIP	0		
FB703	1-216-864-11	SHORT CHIP	0		
FB704	1-216-864-11	SHORT CHIP	0		
FB705	1-216-864-11	SHORT CHIP	0		
FB706	1-216-864-11	SHORT CHIP	0		
FB707	1-216-864-11	SHORT CHIP	0		
FB708	1-216-864-11	SHORT CHIP	0		
FB709	1-216-864-11	SHORT CHIP	0		
FB710	1-216-864-11	SHORT CHIP	0		
FB711	1-216-864-11	SHORT CHIP	0		
FB712	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC701	8-752-106-21	IC CXA2647N-T4			
IC702	8-752-410-68	IC CXD3029R			
IC703	8-753-217-11	IC CXR710160-209R			
IC704	6-705-452-01	IC BA5946FP-E2			
IC705	6-700-195-01	IC MSM51V17400F-10TK-FS			

Ref. No.	Part No.	Description			Remark
IC706	6-705-310-01	IC S-T111B15MC-OGATFG			
		< SHORT >			
JC702	1-216-864-11	SHORT CHIP	0		
JC703	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L701	1-469-128-21	FERRITE, EMI (SMD) (1608)			
		< TRANSISTOR >			
Q701	8-729-054-57	TRANSISTOR	KTN2907AS-RTK		
Q702	8-729-029-10	TRANSISTOR	DTC143TUA-T106		
		< RESISTOR >			
R701	1-216-797-11	METAL CHIP	10	5%	1/10W
R702	1-216-837-11	METAL CHIP	22K	5%	1/10W
R703	1-216-833-11	METAL CHIP	10K	5%	1/10W
R704	1-216-837-11	METAL CHIP	22K	5%	1/10W
R705	1-216-833-11	METAL CHIP	10K	5%	1/10W
R706	1-216-849-11	METAL CHIP	220K	5%	1/10W
R707	1-216-845-11	METAL CHIP	100K	5%	1/10W
R708	1-216-864-11	SHORT CHIP	0		
R709	1-216-849-11	METAL CHIP	220K	5%	1/10W
R710	1-216-837-11	METAL CHIP	22K	5%	1/10W
R711	1-216-841-11	METAL CHIP	47K	5%	1/10W
R712	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W
R714	1-216-841-11	METAL CHIP	47K	5%	1/10W
R715	1-216-837-11	METAL CHIP	22K	5%	1/10W
R716	1-216-821-11	METAL CHIP	1K	5%	1/10W
R717	1-216-833-11	METAL CHIP	10K	5%	1/10W
R718	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R719	1-216-845-11	METAL CHIP	100K	5%	1/10W
R720	1-216-864-11	SHORT CHIP	0		
R721	1-216-845-11	METAL CHIP	100K	5%	1/10W
R722	1-216-864-11	SHORT CHIP	0		
R723	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R724	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R725	1-216-837-11	METAL CHIP	22K	5%	1/10W
R726	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R727	1-216-864-11	SHORT CHIP	0		
R728	1-216-837-11	METAL CHIP	22K	5%	1/10W
R729	1-216-833-11	METAL CHIP	10K	5%	1/10W
R730	1-216-864-11	SHORT CHIP	0		
R731	1-216-833-11	METAL CHIP	10K	5%	1/10W
R732	1-216-837-11	METAL CHIP	22K	5%	1/10W
R733	1-216-841-11	METAL CHIP	47K	5%	1/10W
R734	1-216-837-11	METAL CHIP	22K	5%	1/10W
R735	1-216-864-11	SHORT CHIP	0		
R736	1-216-864-11	SHORT CHIP	0		
R737	1-216-837-11	METAL CHIP	22K	5%	1/10W
R738	1-216-813-11	METAL CHIP	220	5%	1/10W
R739	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R740	1-216-821-11	METAL CHIP	1K	5%	1/10W
R741	1-216-833-11	METAL CHIP	10K	5%	1/10W
R742	1-216-849-11	METAL CHIP	220K	5%	1/10W
R743	1-216-857-11	METAL CHIP	1M	5%	1/10W

Ref. No.	Part No.	Description			Remark
R744	1-216-833-11	METAL CHIP	10K	5%	1/10W
R745	1-216-853-11	METAL CHIP	470K	5%	1/10W
R746	1-216-841-11	METAL CHIP	47K	5%	1/10W
R747	1-216-805-11	METAL CHIP	47	5%	1/10W
R748	1-216-864-11	SHORT CHIP	0		
R749	1-216-805-11	METAL CHIP	47	5%	1/10W
R750	1-216-864-11	SHORT CHIP	0		
R751	1-216-805-11	METAL CHIP	47	5%	1/10W
R752	1-216-864-11	SHORT CHIP	0		
R753	1-216-809-11	METAL CHIP	100	5%	1/10W
R754	1-216-809-11	METAL CHIP	100	5%	1/10W
R755	1-216-809-11	METAL CHIP	100	5%	1/10W
R756	1-216-809-11	METAL CHIP	100	5%	1/10W
R757	1-216-809-11	METAL CHIP	100	5%	1/10W
R758	1-216-809-11	METAL CHIP	100	5%	1/10W
R759	1-216-809-11	METAL CHIP	100	5%	1/10W
R760	1-216-809-11	METAL CHIP	100	5%	1/10W
R761	1-216-857-11	METAL CHIP	1M	5%	1/10W
R762	1-216-833-11	METAL CHIP	10K	5%	1/10W
R763	1-216-821-11	METAL CHIP	1K	5%	1/10W
R764	1-216-853-11	METAL CHIP	470K	5%	1/10W
R765	1-216-833-11	METAL CHIP	10K	5%	1/10W
R766	1-216-809-11	METAL CHIP	100	5%	1/10W
R767	1-216-809-11	METAL CHIP	100	5%	1/10W
R768	1-216-809-11	METAL CHIP	100	5%	1/10W
R769	1-216-809-11	METAL CHIP	100	5%	1/10W
R770	1-216-821-11	METAL CHIP	1K	5%	1/10W
R771	1-216-845-11	METAL CHIP	100K	5%	1/10W
R772	1-216-845-11	METAL CHIP	100K	5%	1/10W
R773	1-216-845-11	METAL CHIP	100K	5%	1/10W
R774	1-216-845-11	METAL CHIP	100K	5%	1/10W
R775	1-216-845-11	METAL CHIP	100K	5%	1/10W
R776	1-216-845-11	METAL CHIP	100K	5%	1/10W
R777	1-216-864-11	SHORT CHIP	0		
R778	1-216-864-11	SHORT CHIP	0		
R779	1-216-864-11	SHORT CHIP	0		
R780	1-216-809-11	METAL CHIP	100	5%	1/10W
R781	1-216-805-11	METAL CHIP	47	5%	1/10W
R782	1-216-805-11	METAL CHIP	47	5%	1/10W
R783	1-216-805-11	METAL CHIP	47	5%	1/10W
R784	1-216-833-11	METAL CHIP	10K	5%	1/10W
R785	1-216-857-11	METAL CHIP	1M	5%	1/10W
R786	1-216-845-11	METAL CHIP	100K	5%	1/10W
R787	1-216-845-11	METAL CHIP	100K	5%	1/10W
R788	1-216-833-11	METAL CHIP	10K	5%	1/10W
R789	1-216-833-11	METAL CHIP	10K	5%	1/10W
R790	1-216-821-11	METAL CHIP	1K	5%	1/10W
R791	1-216-837-11	METAL CHIP	22K	5%	1/10W
R792	1-216-833-11	METAL CHIP	10K	5%	1/10W
R793	1-216-833-11	METAL CHIP	10K	5%	1/10W
R794	1-216-813-11	METAL CHIP	220	5%	1/10W
R795	1-216-864-11	SHORT CHIP	0		
R796	1-216-821-11	METAL CHIP	1K	5%	1/10W
R797	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R798	1-216-821-11	METAL CHIP	1K	5%	1/10W
R799	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1001	1-216-864-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R1002	1-216-864-11	SHORT CHIP	0		
R1003	1-216-817-11	METAL CHIP	470	5%	1/10W
R1004	1-216-817-11	METAL CHIP	470	5%	1/10W
R1005	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1006	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S701	1-571-936-11	SWITCH, LEAF (LIMIT)			
		< VIBRATOR >			
X701	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)			
X702	1-813-281-21	VIBRATOR, CERAMIC (22.58MHz)			
**********					
	A-1077-598-A	JACK BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C751	1-130-487-00	MYLAR	0.022uF	5%	50V
C752	1-130-487-00	MYLAR	0.022uF	5%	50V
C753	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< FERRITE BEAD >			
FB751	1-410-397-21	FERRITE	1.1uH		
FB752	1-410-397-21	FERRITE	1.1uH		
FB753	1-500-445-21	FERRITE, EMI (SMD) (2012)			
		< JACK >			
J751	1-815-325-11	JACK (🎧)			
**********					
	A-1077-596-A	KEY BOARD, COMPLETE			
		**********			
	2-179-027-01	JOG GEAR			
	2-179-030-11	LCD CAN			
	2-179-035-01	LCD PAPER			
	2-179-036-01	LCD HOLDER			
	2-515-645-01	LCD REFLECTOR			
		< CAPACITOR >			
C701	1-819-114-11	ELECT	4.7uF	20%	50V
C702	1-126-163-11	ELECT	4.7uF	20%	50V
C703	1-124-584-00	ELECT	100uF	20%	10V
C704	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C707	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C708	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C709	1-126-163-11	ELECT	4.7uF	20%	50V
C710	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C711	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C712	1-124-261-00	ELECT	10uF	20%	50V
C713	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C714	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C715	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C716	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CNF701	1-819-114-11	CONNECTOR, FFC (LIF (NON-ZIF)) 24P			

Ref. No.	Part No.	Description			Remark
CNF705	1-784-786-11	CONNECTOR, FFC 25P			
		< LED >			
D701	8-719-059-98	LED SLR-342VC3F (STANDBY)			
D702	6-500-564-01	LED UB3803X-J582K (LCD BACK LIGHT)			
D703	6-500-564-01	LED UB3803X-J582K (LCD BACK LIGHT)			
		< IC >			
IC701	6-600-210-01	IC RPM7240-H8			
		< COIL >			
L701	1-410-509-11	INDUCTOR	10uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD701	1-479-082-11	INDICATOR UNIT, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q701	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q702	8-729-034-51	TRANSISTOR	KTC3875		
		< RESISTOR >			
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-216-809-11	METAL CHIP	100	5%	1/10W
R703	1-216-809-11	METAL CHIP	100	5%	1/10W
R704	1-216-809-11	METAL CHIP	100	5%	1/10W
R705	1-216-809-11	METAL CHIP	100	5%	1/10W
R706	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R707	1-216-845-11	METAL CHIP	100K	5%	1/10W
R709	1-216-841-11	METAL CHIP	47K	5%	1/10W
R710	1-216-821-11	METAL CHIP	1K	5%	1/10W
R711	1-216-821-11	METAL CHIP	1K	5%	1/10W
R712	1-216-809-11	METAL CHIP	100	5%	1/10W
R713	1-216-813-11	METAL CHIP	220	5%	1/10W
R714	1-216-821-11	METAL CHIP	1K	5%	1/10W
R715	1-216-821-11	METAL CHIP	1K	5%	1/10W
R716	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R717	1-216-821-11	METAL CHIP	1K	5%	1/10W
R718	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R719	1-216-837-11	METAL CHIP	22K	5%	1/10W
R720	1-216-813-11	METAL CHIP	220	5%	1/10W
R721	1-216-821-11	METAL CHIP	1K	5%	1/10W
R722	1-216-821-11	METAL CHIP	1K	5%	1/10W
R723	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R724	1-216-821-11	METAL CHIP	1K	5%	1/10W
R725	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R726	1-216-837-11	METAL CHIP	22K	5%	1/10W
R727	1-216-864-11	SHORT CHIP	0		
R728	1-216-817-11	METAL CHIP	470	5%	1/10W
R729	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R730	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R731	1-216-817-11	METAL CHIP	470	5%	1/10W
R732	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R733	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R734	1-216-841-11	METAL CHIP	47K	5%	1/10W
R735	1-216-864-11	SHORT CHIP	0		
R736	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R737	1-216-821-11	METAL CHIP	1K	5%	1/10W
R738	1-216-864-11	SHORT CHIP	0		
R739	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S701	1-762-875-21	SWITCH, KEYBOARD (REC)			
S702	1-762-875-21	SWITCH, KEYBOARD (▶▶/▶▶I, PRESET +)			
S703	1-762-875-21	SWITCH, KEYBOARD (I◀◀/◀◀, PRESET –)			
S704	1-762-875-21	SWITCH, KEYBOARD (REPEAT)			
S705	1-762-875-21	SWITCH, KEYBOARD (TUNER AUTOPRESET, BAND)			
S706	1-762-875-21	SWITCH, KEYBOARD (CD ▶II)			
S707	1-762-875-21	SWITCH, KEYBOARD (TAPE ◀ ▶)			
S708	1-762-875-21	SWITCH, KEYBOARD (STOP ■)			
S709	1-762-875-21	SWITCH, KEYBOARD (⏏ OPEN/CLOSE)			
S710	1-762-875-21	SWITCH, KEYBOARD (MODE/DIR)			
S711	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S712	1-762-875-21	SWITCH, KEYBOARD (TUNING –)			
S713	1-762-875-21	SWITCH, KEYBOARD (PUSH ENTER//MEMORY)			
S714	1-762-875-21	SWITCH, KEYBOARD (TUNING +)			
S715	1-762-875-21	SWITCH, KEYBOARD (SOUND)			
S716	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S721	1-478-528-11	ENCODER (ROTARY) (PUSH ENTER//MEMORY)			
S722	1-477-791-11	ENCODER, ROTARY (VOLUME)			
**********					
*	1-671-072-11	LOADING BOARD **********			
		< CAPACITOR >			
C651	1-126-947-11	ELECT	47uF	20%	35V
C653	1-127-888-21	CERAMIC	0.1uF	10%	50V
C654	1-127-888-21	CERAMIC	0.1uF	10%	50V
C656	1-127-888-21	CERAMIC	0.1uF	10%	50V
		< CONNECTOR >			
* CN651	1-785-672-11	PIN, CONNECTOR (PC BOARD) 6P			
		< IC >			
IC651	8-759-962-08	IC BA6208			
		< SWITCH >			
S651	1-771-489-11	SWITCH, LEVER SLIDE (TRAY OPEN/CLOSE DETECT)			
**********					
	A-1077-601-A	MAIN BOARD, COMPLETE (AEP, UK, IT, EE, RU)			
	A-1077-709-A	MAIN BOARD, COMPLETE (KR)			
	A-1077-710-A	MAIN BOARD, COMPLETE (AUS)			
	A-1077-711-A	MAIN BOARD, COMPLETE (US, CND) **********			
	1-693-625-11	TUNER (FM/AM) (US, CND)			
	1-693-626-11	TUNER (FM/AM) (AEP, UK, IT, EE, RU)			
	1-693-628-11	TUNER (FM/AM) (AUS)			
	1-693-629-11	TUNER (FM/AM) (KR)			
	1-829-057-11	CABLE, FLEXIBLE FLAT (11 CORE) (EXCEPT AEP, UK, IT, EE, RU)			
	1-829-943-11	CABLE, FLEXIBLE FLAT (29 CORE)			

MAIN

Ref. No.	Part No.	Description			Remark
	1-829-944-11	CABLE, FLEXIBLE FLAT (25 CORE)			
	1-829-945-11	CABLE, FLEXIBLE FLAT (15 CORE) (AEP, UK, IT, EE, RU)			
	1-829-946-11	CABLE, FLEXIBLE FLAT (8 CORE)			
	2-179-026-01	HOLDER TUNER			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S			
		< CAPACITOR >			
C101	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C102	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C104	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C105	1-130-479-00	MYLAR	0.0047uF	5%	50V
C106	1-124-261-00	ELECT	10uF	20%	50V
C107	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C108	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C109	1-124-261-00	ELECT	10uF	20%	50V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-126-160-11	ELECT	1uF	20%	50V
C112	1-124-261-00	ELECT	10uF	20%	50V
C113	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C114	1-124-261-00	ELECT	10uF	20%	50V
C115	1-126-964-11	ELECT	10uF	20%	50V
C116	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C117	1-124-261-00	ELECT	10uF	20%	50V
C118	1-124-261-00	ELECT	10uF	20%	50V
C119	1-124-261-00	ELECT	10uF	20%	50V
C120	1-130-475-00	MYLAR	0.0022uF	5%	50V
C121	1-136-356-11	FILM	470PF	5%	100V
C122	1-131-696-11	FILM	0.22uF	5%	50V
C123	1-119-772-61	ELECT	47uF	20%	35V
C124	1-128-131-11	ELECT	22uF	20%	50V
C125	1-124-261-00	ELECT	10uF	20%	50V
C126	1-126-960-11	ELECT	1uF	20%	50V
C127	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C128	1-126-964-11	ELECT	10uF	20%	50V
C129	1-126-964-11	ELECT	10uF	20%	50V
C130	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C131	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C132	1-126-965-11	ELECT	22uF	20%	50V
C133	1-130-471-00	MYLAR	0.001uF	10%	50V
C201	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C202	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C204	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C205	1-130-479-00	MYLAR	0.0047uF	5%	50V
C206	1-124-261-00	ELECT	10uF	20%	50V
C207	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C208	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C209	1-124-261-00	ELECT	10uF	20%	50V
C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C211	1-126-160-11	ELECT	1uF	20%	50V
C212	1-124-261-00	ELECT	10uF	20%	50V
C213	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C214	1-124-261-00	ELECT	10uF	20%	50V
C215	1-126-964-11	ELECT	10uF	20%	50V
C216	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C217	1-124-261-00	ELECT	10uF	20%	50V
C218	1-124-261-00	ELECT	10uF	20%	50V
C219	1-124-261-00	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C220	1-130-475-00	MYLAR	0.0022uF	5%	50V
C221	1-136-356-11	FILM	470PF	5%	100V
C222	1-131-696-11	FILM	0.22uF	5%	50V
C223	1-119-772-61	ELECT	47uF	20%	35V
C224	1-128-131-11	ELECT	22uF	20%	50V
C225	1-124-261-00	ELECT	10uF	20%	50V
C226	1-126-960-11	ELECT	1uF	20%	50V
C227	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C228	1-126-964-11	ELECT	10uF	20%	50V
C229	1-126-964-11	ELECT	10uF	20%	50V
C230	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C231	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C232	1-126-965-11	ELECT	22uF	20%	50V
C233	1-130-471-00	MYLAR	0.001uF	10%	50V
C234	1-126-935-11	ELECT	470uF	20%	16V
C295	1-126-934-11	ELECT	220uF	20%	16V
C296	1-126-933-11	ELECT	100uF	20%	16V
C297	1-126-956-11	ELECT	0.1uF	20%	50V
C298	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C299	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C301	1-137-150-11	FILM	0.01uF	5%	100V
C302	1-124-257-00	ELECT	2.2uF	20%	50V
C303	1-130-487-00	MYLAR	0.022uF	5%	50V
C306	1-130-483-00	MYLAR	0.01uF	5%	50V
C307	1-124-261-00	ELECT	10uF	20%	50V
C308	1-119-772-61	ELECT	47uF	20%	35V
C309	1-125-972-61	ELECT	100uF	20%	16V
C311	1-126-935-11	ELECT	470uF	20%	16V
C312	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C313	1-119-772-61	ELECT	47uF	20%	35V
C314	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-126-935-11	ELECT	470uF	20%	16V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-126-176-11	ELECT	220uF	20%	10V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-126-767-11	ELECT	1000uF	20%	16V
C321	1-126-935-11	ELECT	470uF	20%	16V
C324	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C325	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C326	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C327	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C328	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C329	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C330	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C331	1-126-964-11	ELECT	10uF	20%	50V
C332	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C333	1-126-916-11	ELECT	1000uF	20%	6.3V
C334	1-115-456-21	DOUBLE LAYER	0.22F		5.5V
C335	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C337	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C338	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C339	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C340	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C341	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C342	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C343	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V

Ref. No.	Part No.	Description			Remark
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C345	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C348	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C349	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C351	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C352	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C353	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C355	1-104-665-11	ELECT	100uF	20%	25V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C358	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C359	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C370	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C374	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C375	1-164-361-11	CERAMIC CHIP	0.047uF		25V
C376	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C379	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C380	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C381	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C382	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C383	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C386	1-126-933-11	ELECT	100uF	20%	16V
C387	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C388	1-130-479-00	MYLAR	0.0047uF	5%	50V
C389	1-130-479-00	MYLAR	0.0047uF	5%	50V
C390	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C391	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C392	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C393	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C395	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C396	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C397	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C398	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C401	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C403	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C404	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C405	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C406	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C407	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C408	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C409	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C410	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C411	1-126-935-11	ELECT	470uF	20%	16V
		< CONNECTOR >			
* CN302	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P			
* CN306	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CN308	1-819-060-11	CONNECTOR, BOARD TO BOARD			
* CN310	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			
CN311	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CNF301	1-568-830-11	CONNECTOR, FFC 11P (EXCEPT AEP, UK, IT, EE, RU)			
CNF301	1-784-776-11	CONNECTOR, FFC 15P (AEP, UK, IT, EE, RU)			
CNF303	1-691-040-31	CONNECTOR, FFC 8P			
CNF305	1-784-786-11	CONNECTOR, FFC 25P			
CNF307	1-568-844-11	CONNECTOR, FFC 29P			
CNP304	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-063-79	DIODE 1N4002B			
D310	8-719-063-79	DIODE 1N4002B			
D311	8-719-063-79	DIODE 1N4002B			
D312	8-719-063-79	DIODE 1N4002B			
D313	8-719-063-79	DIODE 1N4002B			
D315	8-719-988-61	DIODE 1SS355TE-17			
D316	8-719-988-61	DIODE 1SS355TE-17			
D317	8-719-063-79	DIODE 1N4002B			
D325	8-719-063-79	DIODE 1N4002B			
		< FERRITE BEAD >			
FB101					
FB202					
FB301	1-410-397-21	FERRITE 1.1uH			
FB302					
		< IC >			
IC301	6-705-622-01	IC BD3402KS2			
IC302	8-759-508-69	IC BA3126N			
IC303	8-759-545-66	IC NJM3414AMP (TE2)			
IC304	6-702-095-01	IC BD4726G-TR			
IC309	6-805-088-01	IC MB90474PF-G-202-BNDE1			
IC311	8-759-679-43	IC S-816A33AMC-BAI-T2-G			
		< JACK >			
J301	1-815-629-11	JACK (LINE IN)			
J302	1-817-585-11	JACK, LIGHT FIDER CONNECTOR (OPTICAL DIGITAL OUT (CD))			
		< COIL >			
L301	1-410-509-11	INDUCTOR 10uH			
L303	1-414-142-11	INDUCTOR 1uH			
L304	1-414-142-11	INDUCTOR 1uH			
L305	1-410-509-11	INDUCTOR 10uH			
		< TRANSISTOR >			
Q101	8-729-905-50	TRANSISTOR DTC343TS			
Q102	8-729-107-43	TRANSISTOR 2SC3624-L18			
Q103	8-729-905-50	TRANSISTOR DTC343TS			
Q201	8-729-905-50	TRANSISTOR DTC343TS			
Q202	8-729-107-43	TRANSISTOR 2SC3624-L18			
Q203	8-729-905-50	TRANSISTOR DTC343TS			
Q302	8-729-037-16	TRANSISTOR KRA103M-AT			
Q303	8-729-038-54	TRANSISTOR KRA102S			
Q304	8-729-036-58	TRANSISTOR KRC102M-AT			
Q305	8-729-038-67	TRANSISTOR KRC102S			
Q307	8-729-036-89	TRANSISTOR KTC3198GR-AT			
Q308	8-729-036-89	TRANSISTOR KTC3198GR-AT			
Q310	8-729-801-93	TRANSISTOR 2SD1387-3			

MAIN

Ref. No.	Part No.	Description			Remark
Q311	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q313	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q314	8-729-037-13	TRANSISTOR	KTA1271Y		
Q315	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q317	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q318	8-729-037-13	TRANSISTOR	KTA1271Y		
Q319	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q320	8-729-038-67	TRANSISTOR	KRC102S		
Q322	8-729-905-34	TRANSISTOR	2SC4081-Q		
Q323	8-729-038-54	TRANSISTOR	KRA102S		
Q324	8-729-038-67	TRANSISTOR	KRC102S		
Q325	8-729-028-99	TRANSISTOR	DTC114YUA-T106		
Q326	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q327	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q328	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q329	8-729-038-67	TRANSISTOR	KRC102S		
Q330	8-729-038-67	TRANSISTOR	KRC102S		
Q331	8-729-101-07	TRANSISTOR	2SB798-DL		
Q333	8-729-905-34	TRANSISTOR	2SC4081-Q		
Q334	8-729-905-34	TRANSISTOR	2SC4081-Q		
Q335	8-729-905-34	TRANSISTOR	2SC4081-Q		
		< RESISTOR >			
R101	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R103	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R104	1-216-841-11	METAL CHIP	47K	5%	1/10W
R105	1-216-821-11	METAL CHIP	1K	5%	1/10W
R106	1-216-813-11	METAL CHIP	220	5%	1/10W
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W
R108	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R109	1-216-821-11	METAL CHIP	1K	5%	1/10W
R110	1-216-845-11	METAL CHIP	100K	5%	1/10W
R111	1-216-841-11	METAL CHIP	47K	5%	1/10W
R112	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R113	1-216-845-11	METAL CHIP	100K	5%	1/10W
R114	1-216-849-11	METAL CHIP	220K	5%	1/10W
R115	1-216-845-11	METAL CHIP	100K	5%	1/10W
R116	1-216-853-11	METAL CHIP	470K	5%	1/10W
R117	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R118	1-216-864-11	SHORT CHIP	0		
R119	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R120	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-845-11	METAL CHIP	100K	5%	1/10W
R122	1-216-837-11	METAL CHIP	22K	5%	1/10W
R123	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R124	1-216-833-11	METAL CHIP	10K	5%	1/10W
R125	1-249-397-11	CARBON	22	5%	1/4W
R126	1-216-821-11	METAL CHIP	1K	5%	1/10W
R127	1-216-817-11	METAL CHIP	470	5%	1/10W
R128	1-216-841-11	METAL CHIP	47K	5%	1/10W
R129	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R131	1-216-841-11	METAL CHIP	47K	5%	1/10W
R132	1-216-841-11	METAL CHIP	47K	5%	1/10W
R133	1-216-821-11	METAL CHIP	1K	5%	1/10W
R134	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R135	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R136	1-216-817-11	METAL CHIP	470	5%	1/10W
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R202	1-216-833-11	METAL CHIP	10K	5%	1/10W
R203	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R204	1-216-841-11	METAL CHIP	47K	5%	1/10W
R205	1-216-821-11	METAL CHIP	1K	5%	1/10W
R206	1-216-813-11	METAL CHIP	220	5%	1/10W
R207	1-216-821-11	METAL CHIP	1K	5%	1/10W
R208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-821-11	METAL CHIP	1K	5%	1/10W
R210	1-216-845-11	METAL CHIP	100K	5%	1/10W
R211	1-216-841-11	METAL CHIP	47K	5%	1/10W
R212	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R213	1-216-845-11	METAL CHIP	100K	5%	1/10W
R214	1-216-849-11	METAL CHIP	220K	5%	1/10W
R215	1-216-845-11	METAL CHIP	100K	5%	1/10W
R216	1-216-853-11	METAL CHIP	470K	5%	1/10W
R217	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R218	1-216-864-11	SHORT CHIP	0		
R219	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R220	1-216-833-11	METAL CHIP	10K	5%	1/10W
R221	1-216-845-11	METAL CHIP	100K	5%	1/10W
R222	1-216-837-11	METAL CHIP	22K	5%	1/10W
R223	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R225	1-249-397-11	CARBON	22	5%	1/4W
R226	1-216-821-11	METAL CHIP	1K	5%	1/10W
R227	1-216-817-11	METAL CHIP	470	5%	1/10W
R228	1-216-841-11	METAL CHIP	47K	5%	1/10W
R229	1-216-833-11	METAL CHIP	10K	5%	1/10W
R230	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R231	1-216-841-11	METAL CHIP	47K	5%	1/10W
R232	1-216-841-11	METAL CHIP	47K	5%	1/10W
R233	1-216-821-11	METAL CHIP	1K	5%	1/10W
R234	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R235	1-216-821-11	METAL CHIP	1K	5%	1/10W
R236	1-216-817-11	METAL CHIP	470	5%	1/10W
R301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R302	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R303	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R304	1-216-837-11	METAL CHIP	22K	5%	1/10W
R305	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R306	1-217-641-00	FUSIBLE	4.7	5%	1/4W F
⚠R307	1-217-641-00	FUSIBLE	4.7	5%	1/4W F
R308	1-216-837-11	METAL CHIP	22K	5%	1/10W
R309	1-216-837-11	METAL CHIP	22K	5%	1/10W
R310	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R311	1-219-153-11	FUSIBLE	10	5%	1/4W F
R312	1-216-849-11	METAL CHIP	220K	5%	1/10W
R313	1-216-833-11	METAL CHIP	10K	5%	1/10W
R314	1-216-833-11	METAL CHIP	10K	5%	1/10W
R315	1-249-401-11	CARBON	47	5%	1/4W
R318	1-216-864-11	SHORT CHIP	0		
R319	1-216-841-11	METAL CHIP	47K	5%	1/10W
R320	1-216-821-11	METAL CHIP	1K	5%	1/10W
R322	1-216-841-11	METAL CHIP	47K	5%	1/10W
R323	1-216-821-11	METAL CHIP	1K	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
R326	1-216-841-11	METAL CHIP	47K	5%	1/10W
R327	1-216-841-11	METAL CHIP	47K	5%	1/10W
R328	1-216-841-11	METAL CHIP	47K	5%	1/10W
R329	1-216-841-11	METAL CHIP	47K	5%	1/10W
R330	1-216-841-11	METAL CHIP	47K	5%	1/10W
R331	1-216-841-11	METAL CHIP	47K	5%	1/10W
R332	1-216-841-11	METAL CHIP	47K	5%	1/10W
R334	1-216-841-11	METAL CHIP	47K	5%	1/10W
R335	1-216-841-11	METAL CHIP	47K	5%	1/10W
R336	1-216-841-11	METAL CHIP	47K	5%	1/10W
R338	1-216-841-11	METAL CHIP	47K	5%	1/10W
R339	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R340	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R341	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R342	1-216-821-11	METAL CHIP	1K	5%	1/10W (US, CND)
R342	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (AUS)
R342	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (KR)
R342	1-216-864-11	SHORT CHIP	0 (AEP, UK, IT, EE, RU)		
R343	1-216-817-11	METAL CHIP	470	5%	1/10W (US, CND, AUS)
R343	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (KR)
R343	1-216-864-11	SHORT CHIP	0 (AEP, UK, IT, EE, RU)		
R344	1-216-841-11	METAL CHIP	47K	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R346	1-216-841-11	METAL CHIP	47K	5%	1/10W
R347	1-216-841-11	METAL CHIP	47K	5%	1/10W
R348	1-216-841-11	METAL CHIP	47K	5%	1/10W
R349	1-216-841-11	METAL CHIP	47K	5%	1/10W
R350	1-216-841-11	METAL CHIP	47K	5%	1/10W
R351	1-216-841-11	METAL CHIP	47K	5%	1/10W
R352	1-249-393-11	CARBON	10	5%	1/4W
R353	1-216-833-11	METAL CHIP	10K	5%	1/10W
R354	1-216-821-11	METAL CHIP	1K	5%	1/10W
R355	1-216-813-11	METAL CHIP	220	5%	1/10W
R356	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R357	1-216-845-11	METAL CHIP	100K	5%	1/10W
R358	1-216-845-11	METAL CHIP	100K	5%	1/10W
R359	1-216-841-11	METAL CHIP	47K	5%	1/10W
R360	1-216-821-11	METAL CHIP	1K	5%	1/10W
R361	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R362	1-216-841-11	METAL CHIP	47K	5%	1/10W
R363	1-216-845-11	METAL CHIP	100K	5%	1/10W
R364	1-216-841-11	METAL CHIP	47K	5%	1/10W
R365	1-216-837-11	METAL CHIP	22K	5%	1/10W
R368	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R369	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R370	1-216-841-11	METAL CHIP	47K	5%	1/10W
R371	1-216-841-11	METAL CHIP	47K	5%	1/10W
R372	1-216-845-11	METAL CHIP	100K	5%	1/10W
R373	1-216-849-11	METAL CHIP	220K	5%	1/10W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W
R375	1-216-845-11	METAL CHIP	100K	5%	1/10W
R376	1-216-845-11	METAL CHIP	100K	5%	1/10W
R377	1-216-857-11	METAL CHIP	1M	5%	1/10W

Ref. No.	Part No.	Description			Remark
R379	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R380	1-216-841-11	METAL CHIP	47K	5%	1/10W
R381	1-216-821-11	METAL CHIP	1K	5%	1/10W
R382	1-216-841-11	METAL CHIP	47K	5%	1/10W
R383	1-216-841-11	METAL CHIP	47K	5%	1/10W
R384	1-216-821-11	METAL CHIP	1K	5%	1/10W
R385	1-216-821-11	METAL CHIP	1K	5%	1/10W
R386	1-216-821-11	METAL CHIP	1K	5%	1/10W
R387	1-216-833-11	METAL CHIP	10K	5%	1/10W
R388	1-216-845-11	METAL CHIP	100K	5%	1/10W
R389	1-216-817-11	METAL CHIP	470	5%	1/10W
R390	1-249-397-11	CARBON	22	5%	1/4W
R391	1-216-833-11	METAL CHIP	10K	5%	1/10W
R392	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R400	1-216-821-11	METAL CHIP	1K	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-809-11	METAL CHIP	100	5%	1/10W
R414	1-216-809-11	METAL CHIP	100	5%	1/10W
R415	1-216-809-11	METAL CHIP	100	5%	1/10W
R416	1-216-809-11	METAL CHIP	100	5%	1/10W
R417	1-216-809-11	METAL CHIP	100	5%	1/10W
R418	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-809-11	METAL CHIP	100	5%	1/10W
R421	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-809-11	METAL CHIP	100	5%	1/10W
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-821-11	METAL CHIP	1K	5%	1/10W
R428	1-216-821-11	METAL CHIP	1K	5%	1/10W
R429	1-216-821-11	METAL CHIP	1K	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R444	1-216-809-11	METAL CHIP	100	5%	1/10W
R445	1-216-809-11	METAL CHIP	100	5%	1/10W
R446	1-216-809-11	METAL CHIP	100	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W
R448	1-216-809-11	METAL CHIP	100	5%	1/10W
R452	1-216-809-11	METAL CHIP	100	5%	1/10W
R453	1-216-809-11	METAL CHIP	100	5%	1/10W
R454	1-216-809-11	METAL CHIP	100	5%	1/10W

MAIN **POWER**

Ref. No.	Part No.	Description			Remark
R455	1-216-821-11	METAL CHIP	1K	5%	1/10W
R456	1-216-821-11	METAL CHIP	1K	5%	1/10W
R457	1-216-821-11	METAL CHIP	1K	5%	1/10W
R458	1-216-809-11	METAL CHIP	100	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R462	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R464	1-216-809-11	METAL CHIP	100	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R466	1-216-809-11	METAL CHIP	100	5%	1/10W
R467	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-809-11	METAL CHIP	100	5%	1/10W
R470	1-216-809-11	METAL CHIP	100	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-809-11	METAL CHIP	100	5%	1/10W
R473	1-216-809-11	METAL CHIP	100	5%	1/10W
R474	1-216-809-11	METAL CHIP	100	5%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W
R476	1-216-809-11	METAL CHIP	100	5%	1/10W
R478	1-216-809-11	METAL CHIP	100	5%	1/10W
R483	1-216-864-11	SHORT CHIP	0		
R486	1-216-809-11	METAL CHIP	100	5%	1/10W
R487	1-216-809-11	METAL CHIP	100	5%	1/10W
R488	1-216-809-11	METAL CHIP	100	5%	1/10W
R489	1-216-809-11	METAL CHIP	100	5%	1/10W
R490	1-216-809-11	METAL CHIP	100	5%	1/10W
R491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R493	1-216-821-11	METAL CHIP	1K	5%	1/10W
R494	1-216-821-11	METAL CHIP	1K	5%	1/10W
R495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R496	1-216-821-11	METAL CHIP	1K	5%	1/10W
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W
		< VARIABLE RESISTOR >			
RV101	1-241-768-11	RES, ADJ CERMET	220K		
RV201	1-241-768-11	RES, ADJ CERMET	220K		
		< TRANSFORMER >			
T101	1-419-080-21	COIL			
T201	1-419-080-21	COIL			
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
		< VIBRATOR >			
X301	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-795-054-21	VIBRATOR, CERAMIC (4.19MHz)			
**********					
	A-1077-663-A	POWER BOARD, COMPLETE (A70: AEP, UK, IT, EE, RU, AUS)			
	A-1077-762-A	POWER BOARD, COMPLETE (A70: US, CND)			
		**********			
	1-533-233-31	FUSE HOLDER			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C523	1-126-964-11	ELECT	10uF	20%	50V
C529	1-126-960-11	ELECT	1uF	20%	50V
C603	1-136-497-81	FILM	0.1uF	5%	50V
C604	1-136-497-81	FILM	0.1uF	5%	50V
C605	1-128-548-11	ELECT	4700uF	20%	25V
C606	1-136-497-81	FILM	0.1uF	5%	50V
⚠C609	1-113-925-11	CERAMIC	0.01uF	20%	250V
C610	1-126-943-11	ELECT	2200uF	20%	25V
C611	1-136-497-81	FILM	0.1uF	5%	50V
C612	1-101-005-00	CERAMIC	0.022uF		50V
C613	1-101-005-00	CERAMIC	0.022uF		50V
C614	1-101-005-00	CERAMIC	0.022uF		50V
C615	1-101-005-00	CERAMIC	0.022uF		50V
C617	1-136-497-81	FILM	0.1uF	5%	50V
C618	1-136-497-81	FILM	0.1uF	5%	50V
C619	1-136-497-81	FILM	0.1uF	5%	50V
C620	1-136-497-81	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN602	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
* CN603	1-564-596-11	PLUG, CONNECTOR 15P			
		< DIODE >			
D505	8-719-109-72	DIODE RD3.9ESB2			
D506	8-719-991-33	DIODE 1SS133T-77			
D507	8-719-991-33	DIODE 1SS133T-77			
D508	8-719-991-33	DIODE 1SS133T-77			
D513	8-719-991-33	DIODE 1SS133T-77			
D514	8-719-991-33	DIODE 1SS133T-77			
D601	8-719-500-60	DIODE D5SBA20			
D602	8-719-046-07	DIODE 2A02M			
D603	8-719-046-07	DIODE 2A02M			
D604	8-719-046-07	DIODE 2A02M			
D605	8-719-046-07	DIODE 2A02M			
D610	8-719-991-33	DIODE 1SS133T-77			
D611	8-719-991-33	DIODE 1SS133T-77			
D612	8-719-991-33	DIODE 1SS133T-77			
D613	8-719-991-33	DIODE 1SS133T-77			
D614	8-719-991-33	DIODE 1SS133T-77			
		< FUSE >			
⚠F601	1-533-472-12	FUSE (T5AL/250V)			
⚠F602	1-533-472-12	FUSE (T5AL/250V)			
⚠F603	1-533-449-12	FUSE, GLASS TUBE (DIA. 5) (T2AL/125V) (US, CND)			
⚠F603	1-533-466-12	FUSE, GLASS TUBE (DIA. 5) (T1.25AL/250V) (A70: AEP, UK, IT, EE, RU, AUS)			
		< LINE FILTER >			
⚠LF604	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		< RESISTOR >			
R536	1-249-421-11	CARBON	2.2K	5%	1/4W
R543	1-249-433-11	CARBON	22K	5%	1/4W
⚠R601	1-219-121-11	FUSIBLE	0.22	5%	1/4W F
⚠R602	1-219-121-11	FUSIBLE	0.22	5%	1/4W F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
⚠R603	1-219-237-51	SOLID	3.3M	20%	1/2W (US, CND)
R604	1-249-417-11	CARBON	1K	5%	1/4W
R605	1-249-417-11	CARBON	1K	5%	1/4W
R606	1-249-425-11	CARBON	4.7K	5%	1/4W
R607	1-249-425-11	CARBON	4.7K	5%	1/4W
		< RELAY >			
⚠RY601	1-755-276-11	RELAY, POWER			
		< TRANSFORMER >			
⚠T602	1-439-779-11	TRANSFORMER, POWER (A70: AEP, UK, IT, EE, RU, AUS)			
⚠T602	1-439-781-11	TRANSFORMER, POWER (US, CND)			
**********					
		SPK BOARD			
		**********			
		< CAPACITOR >			
C535	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< TERMINAL BOARD >			
J502	1-694-156-11	TERMINAL BOARD (SPEAKER IMPEDANCE USE 6Ω)			
**********					
	A-1077-604-A	SUB BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C361	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C363	1-126-951-11	ELECT	470uF	20%	35V
C365	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C366	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-935-11	ELECT	470uF	20%	16V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C369	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-126-935-11	ELECT	470uF	20%	16V
C372	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C373	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C377	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C378	1-126-935-11	ELECT	470uF	20%	16V
C399	1-126-949-11	ELECT	220uF	20%	35V
C400	1-115-156-11	CERAMIC CHIP	1uF		10V
		< CONNECTOR >			
CN309	1-819-061-11	CONNECTOR, BOARD TO BOARD			
CN312	1-819-052-11	PIN, CONNECTOR 16P (SPEAKER OUT (POWER IN))			
		< DIODE >			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-991-33	DIODE 1SS133T-77			
D320	8-719-063-79	DIODE 1N4002B			
D321	8-719-063-79	DIODE 1N4002B			

Ref. No.	Part No.	Description			Remark
D322	8-719-063-79	DIODE 1N4002B			
D326	8-719-981-94	DIODE MTZJ-2.7A			
		< IC >			
IC305	6-705-013-01	IC XC6202P392PR			
IC306	8-759-231-57	IC TA7810S			
IC307	8-759-071-48	IC TA7807S			
IC308	6-701-760-01	IC uPC3504AHF			
		< TRANSISTOR >			
Q309	8-729-037-13	TRANSISTOR	KTA1271Y		
Q312	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q316	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q321	8-729-038-67	TRANSISTOR	KRC102S		
Q336	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q337	8-729-028-76	TRANSISTOR	DTA114YUA-T106		
		< RESISTOR >			
R316	1-216-845-11	METAL CHIP	100K	5%	1/10W
R317	1-216-821-11	METAL CHIP	1K	5%	1/10W
R366	1-216-821-11	METAL CHIP	1K	5%	1/10W
R367	1-216-841-11	METAL CHIP	47K	5%	1/10W
**********					
	A-1077-600-A	TOP KEY BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C754	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< RESISTOR >			
R762	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R763	1-216-821-11	METAL CHIP	1K	5%	1/10W
R764	1-216-821-11	METAL CHIP	1K	5%	1/10W
R765	1-216-813-11	METAL CHIP	220	5%	1/10W
R766	1-216-817-11	METAL CHIP	470	5%	1/10W
		< SWITCH >			
S762	1-762-875-21	SWITCH, KEYBOARD (TIMER)			
S763	1-762-875-21	SWITCH, KEYBOARD (CLOCK)			
S764	1-762-875-21	SWITCH, KEYBOARD (STANDBY)			
S765	1-762-875-21	SWITCH, KEYBOARD (SLEEP)			
S766	1-762-875-21	SWITCH, KEYBOARD (POWER)			
**********					
		MISCELLANEOUS			
		**********			
14	1-693-625-11	TUNER (FM/AM) (US, CND)			
14	1-693-626-11	TUNER (FM/AM) (AEP, UK, IT, EE, RU)			
14	1-693-628-11	TUNER (FM/AM) (AUS)			
14	1-693-629-11	TUNER (FM/AM) (KR)			
101	1-796-351-81	MECHANISM, SIGNAL CASSETTE (CMAL1Z252A)			
153	1-452-899-21	MAGNET			
170	1-829-368-11	CABLE, FLEXIBLE FLAT (16 CORE)			
⚠201	8-848-483-12	OPTICAL PICK-UP (KSS-213C/C2RP1)			
205	X-2162-709-2	CHASSIS ASSY (CDP), MOTOR (including M702 (SPINDLE))			

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Ref. No.	Part No.	Description	Remark
251	X-2162-707-2	CHASSIS ASSY (RDP) (RP), MOTOR (including M702 (SPINDLE))	
⚠255	8-820-161-02	OPTICAL PICK-UP (KSS-213R/C2RP)	
⚠355	1-769-079-41	CORD, POWER (A50: KR)	
⚠355	1-769-744-52	CORD, POWER (A50: AEP, UK, EE, RU)	
361	1-830-212-12	LEAD (WITH CONNECTOR) (A50)	
⚠455	1-769-744-52	CORD, POWER (A70: AEP, UK, IT, EE, RU)	
⚠455	1-775-790-12	CORD, POWER (A70: AUS)	
⚠455	1-783-531-22	CORD, POWER (A70: US, CND)	
460	1-830-212-11	LEAD (WITH CONNECTOR) (A70)	
M651	A-3320-538-A	MOTOR ASSY, LOADING	
M701	X-2162-712-2	GEAR ASSY (R) (RP), MOTOR (SLED) (for KSM-213RCP)	
M701	X-2625-769-1	GEAR ASSY (MB) (RP), MOTOR (SLED) (for KSM-213C/C2RP1)	
⚠T601	1-443-512-11	TRANSFORMER, POWER (A50)	
⚠T601	1-443-513-11	TRANSFORMER, POWER (A70: AEP, UK, IT, EE, AUS)	
⚠T601	1-443-514-11	TRANSFORMER, POWER (A70: US, CND)	
**********			
		ACCESSORIES **********	
	1-754-102-31	ANTENNA, LOOP (LW. MW)	
	1-754-243-11	ANTENNA (FM)	
⚠	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
	2-318-613-11	MANUAL, INSTRUCTION (ENGLISH) (US, CND, KR)	
	2-318-613-21	MANUAL, INSTRUCTION (FRENCH) (CND)	
	2-318-613-31	MANUAL, INSTRUCTION (ENGLISH, SPANISH) (AEP, UK, KR, AUS)	
	2-318-613-41	MANUAL, INSTRUCTION (FRENCH, GERMAN) (AEP)	
	2-318-613-51	MANUAL, INSTRUCTION (DUTCH, PORTUGUESE) (AEP)	
	2-318-613-61	MANUAL, INSTRUCTION (ITALIAN) (IT)	
	2-318-613-71	MANUAL, INSTRUCTION (FINNISH, SWEDISH) (EE, RU)	
	2-318-613-81	MANUAL, INSTRUCTION (CZECH, HUNGARIAN, POLISH) (EE, RU)	
	2-318-613-91	MANUAL, INSTRUCTION (RUSSIAN, SLOVAKIAN) (EE, RU)	
	2-515-646-11	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (ENGLISH) (US, CND, KR)	
	2-515-646-21	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (FRENCH) (CND)	
	2-515-646-31	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (ENGLISH, SPANISH) (AEP, UK, KR, AUS)	
	2-515-646-41	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (FRENCH, GERMAN) (AEP)	
	2-515-646-51	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (DUTCH, PORTUGUESE) (AEP)	
	2-515-646-61	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (ITALIAN) (IT)	
	2-515-646-71	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (FINNISH, SWEDISH) (EE, RU)	
	2-515-646-81	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (CZECH, HUNGARIAN, POLISH) (EE, RU)	
	2-515-646-91	MANUAL, INSTRUCTION (SonicStage Ver 2.1) (RUSSIAN, SLOVAKIAN) (EE, RU)	

Ref. No.	Part No.	Description	Remark
	3-267-151-21	LID BATTERY (for RMT-A50)	
	A-1097-232-A	REMOTE COMMANDER (RMT-A50)	
	X-2024-504-2	CD-ROM (APPLICATION) ASSY (SS2.1) (SonicStage)	

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MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.11	New
1.1	2005.02	Addition of CMT-A50 Italian model. Revision of electrical parts. Revision of mechanical parts.